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INDOORS AND OUT

THE
HOMEBUILDERS
MAGAZINE

MAY 1907

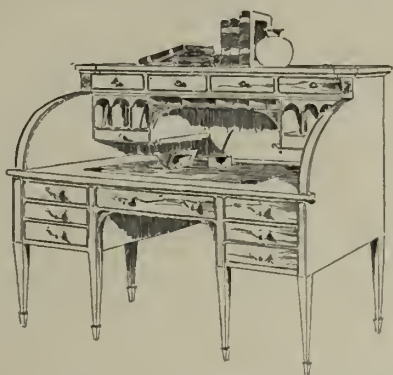


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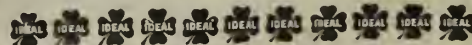
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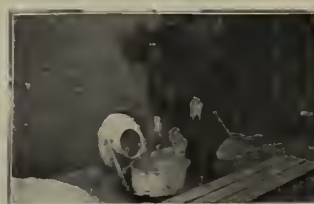


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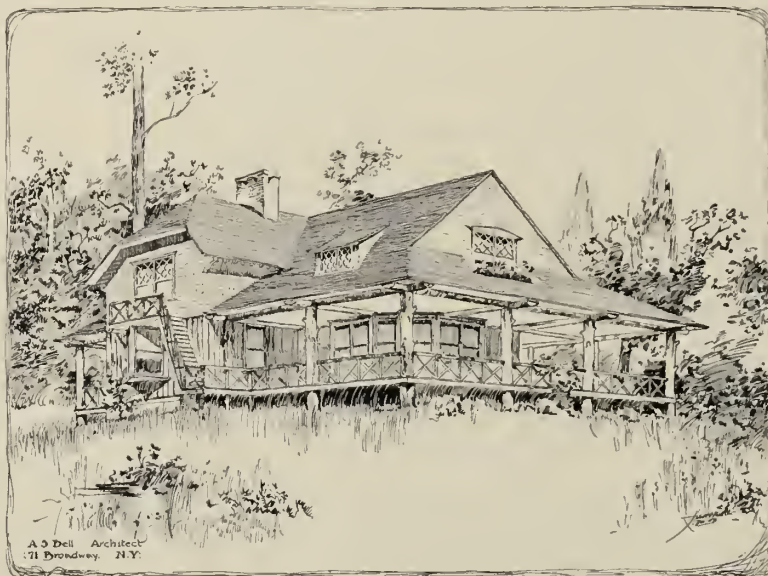
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He now appears as an advocate of the simple life, "The wholesome sentiments," he says, "which spring from country life are being overwhelmed by the ambitions and tendencies that flow out from our great cities. Few have the hardihood to withstand the swirl and rush of city life, or to remain indifferent to the promises of sudden wealth and the excitement of speculation in a metropolis, where immense fortunes are made and lost in a single day."

True as these statements of Mr. Cleveland's undoubtedly are, deplorable as the conditions they indicate are known to be, there can be little use in pointing out the evil without making at least a suggestion for a possible remedy.

There are thousands of dwellers in cities who earnestly and sincerely desire to lead a simpler and more natural life, who long to live near to nature and thus nearer to God. They know and love the healthful life of the country, either from early association or from vacation visits. Will Mr. Cleveland go further and advise them how to realize their longing? Can they give up their positions in the city and go to the country to seek employment? What can they find there to do that will pay them, not high wages, but merely a comfortable, decent living?

There is a charming theory that one can live in the country and work in the city, but it is not practical

in nine cases out of ten.] Only those of us who have tried it know how thoroughly impracticable it is. At best it means long hours away from home; a useless waste of time in riding to and fro and the companionship of wife and children reduced to the merest week-end acquaintanceship.

If one has money enough to buy, not a small farm but a large, well paying country dairy or stock business, then the problem may be solved. But, how is one to get the wherewithal unless by spending the greater and best part of one's life in the city accumulating the necessary capital. There remains the suburb. It is unfortunate that into most suburbs has crept the same striving after effect, the same social and financial burdens to maintain what are rightly called appearances. Were it possible to restore a nearby suburb to village simplicity, then, indeed, would the ideal place of residence be found.

Blessed be the simple life near to nature, for blessed it undoubtedly is. Let us all give our best consideration and our most earnest thought to the solution of the problem that confronts us. Let us discover the way to arrive at that peaceful, happy goal of just and healthy ambition.

Written in a city flat, March 18, 1907.

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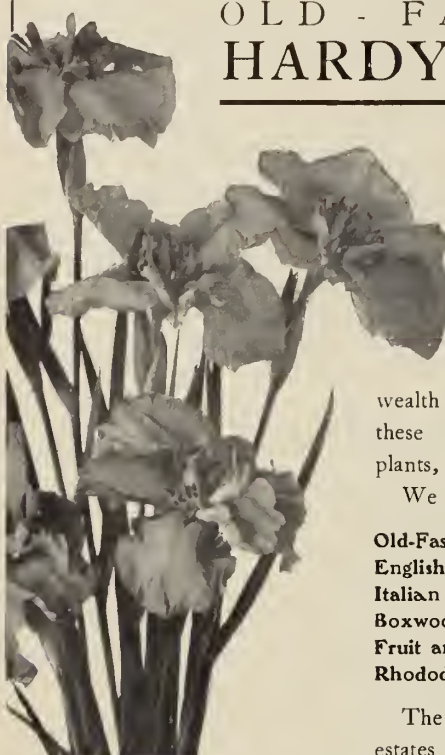


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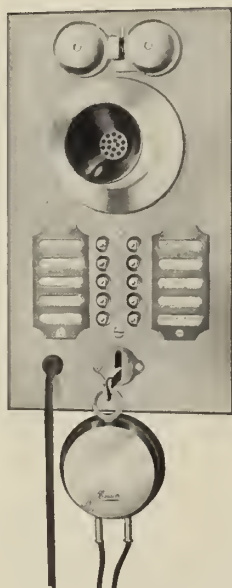
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CHIEFLY BY MEANS OF ARCHITECTURE AND THE ARTS ALLIED TO IT

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PUBLISHERS 85 WATER STREET BOSTON

NEW YORK
501 Transit Building
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Entered at the Boston, Mass., Post Office as Second-Class
Mail Matter, October 14, 1905.

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Contents for May

VOL. IV

1907

No. 2

A COTTAGE ENTRANCE ADORNED WITH LEAF AND FLOWER	Frontispiece
THE MISSION STYLE IN MODERN ARCHITECTURE.	
I. The Founding of the Old Missions	By George Wharton James 51
	(Illustrated)
A SEASIDE GARDEN	By Katharine P. Peabody 59
	(Illustrated)
WATERSIDE BUNGALOWS AND BOAT HOUSES	By Edward W. Gregory 63
	(Illustrated)
THE EVOLUTION OF THE BUNGALOW IN CALIFORNIA (Concluded)	By M. H. Lazear 69
	(Illustrated)
A \$200,000 LOG CABIN	73
	(Illustrated)
A CLUB-WOMEN'S PALATIAL HOME	By Florence Finch Kelly 77
	(Illustrated)
A HOUSE ON A NORTH SHORE HILLSIDE	83
	(Illustrated)
A SHORE HOLIDAY BUNGALOW	Designed by Homer Kiessling 88
	(Illustrated)
THE BUNGALOW OF THE FIVE UNMARRIED BROTHERS	By J. B. 90
	(Illustrated)
HOW TO FURNISH A BUNGALOW. II. Floor Coverings	By F. F. K. 91
AN APPRECIATION OF OLD MAHOGANY. V. The Invisible Supply	By Ellen Cady Eaton 92
	(Illustrated)
FLOWER BED EDGINGS	By Ernest Hemming 94
	(Illustrated)
THE HOME GROUNDS	98
	(Illustrated)
FROM OUR OFFICE WINDOW	100



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A MONTHLY MAGAZINE DEVOTED TO THE BEAUTIFYING OF AMERICA
CHIEFLY BY MEANS OF ARCHITECTURE AND THE ARTS ALLIED TO IT

VOL. IV

MAY, 1907

No. 2



The Mission of San Carlos Borromeo, in El Carmelo Valley, Monterey

The Mission Style in Modern Architecture

A SERIES OF ARTICLES SETTING FORTH THE ORIGIN AND CHARACTERISTICS OF THE EARLY SPANISH ARCHITECTURE OF CALIFORNIA,—AN ARCHITECTURE AS “INDIGENOUS” AS ANY EXISTING IN AMERICA,—AND SHOWING HOW SUCCESSFULLY THAT ARCHITECTURE HAS BEEN ADAPTED TO VARIOUS MODERN STRUCTURES

BY GEORGE WHARTON JAMES

Author of “In and Out of the Old Missions of California,” “Indians of the Painted Desert Region,”
“In and Around the Grand Canyon,” etc.

I. The Founding of the Old Missions

THAT we little know what great results will spring from our actions is a truism almost trite. In nothing is this better exemplified than in the work of Padre Junipero Serra and his priestly co-laborers who built the Franciscan missions of California. Little did these priestly architects and builders think, when they began the erection of their chain of twenty-one missions in the Golden State, that a century and a quarter later their work would be the inspiration for what is practically a new style of architecture.

I am well aware that there are those who deny that there is such a thing as a “Mission Style.” To this subject I shall address myself later. In this article I merely wish to present a brief historic survey of the establishment of the missions, so that intelligent readers of subsequent articles will be reasonably informed as to

the origin of the style, and the motives and circumstances that led to its origin.

No student of history can be unaware of the fact that one of the avowed objects of the King of Spain in taking possession of the newly discovered continent of America was that the benighted aborigines might have the Christianity of the Roman Catholic Church presented to them. Accordingly, missionaries accompanied the explorers everywhere; and as soon as colonization was effected, churches and missions were established. In an incredibly short space of time a large part of the country was dotted with missions, in each of which one or two priests, with a handful of soldiers as guards, undertook the civilization and the Christianization of the Indians in the vicinity.

At this time there was great activity among the various orders of the Church. Franciscans,



THE MISSION OF SAN ANTONIO DE PADUA

Copyright, 1903, C. C. Pierce & Co.

The earthquake of April, 1906, wrought further injury to its state of dilapidation and neglect

Dominicans, Jesuits, Jeronimites, Augustinians, and others, vied with each other in seeking converts; and for almost two hundred years, before a single mission was established in what is now the California of the United States, they worked in Mexico, with untiring zeal and unrestrained enthusiasm. Long before there were any missions established in California there were establishments and churches throughout what are now Arizona and New Mexico, Sonora in Mexico and the peninsula of Lower California. These latter were established by the Jesuits. But in 1767 King Carlos III of Spain expelled the Jesuits from all of his dominions, and in Lower California the Franciscans were asked to take their place. At the same time it was decided to colonize Alta California and establish a chain of missions along the coast, reaching from the port of San Diego, (which had been discovered by Cabrillo over two centuries before) as far north as the port of San Francisco, by which name a small harbor under Point Reyes was then known. To carry out the wishes of Carlos, a special officer with large powers was sent out to Mexico. On consulting with the authorities of the college of San Fernando of the City of Mexico, as to who could best undertake the important work of establishing the new missions and controlling those

founded by the Jesuits, the King's Viceroy, Galvez, was advised that the very man needed was to be found in Junipero Serra. The recommendation was followed and Galvez never found reason to regret his choice.

Serra was an indefatigable missionary, a wise administrator, and full of zeal in his chosen work. As soon as arrangements were made for the carrying of the banner of the King of Spain and the symbol of the church from Lower California, Serra sent one of his co-workers, accompanied by an officer, to collect from the peninsular missions what ecclesiastical supplies and cattle they could find for the new establishments. Other supplies were forthcoming from the royal storehouses, and both Galvez and Serra helped in person to load them into the vessels. Three ships were thus equipped, and when these started, two land expeditions also left. These parties were instructed to meet at San Diego at as early a date as possible. After numerous adventures, two of the vessels reached the desired haven. One was lost and nothing was ever again heard of it. Serra accompanied one of the land expeditions and marched the weary length of the peninsula, over the sandy desert and barren plains and up and down the steep slopes of the ranges until finally San Diego was reached. Here



THE FRONT WALL OF THE MISSION SAN GABRIEL, NEAR LOS ANGELES



THE MISSION OF SAN LUIS OBISPO DE TOLOSA



A PORTION OF SAN JUAN CAPISTRANO MISSION

At the left begins the arcaded ambulatory : at the right are the ruins of the church



THE WELL-KNOWN SANTA BARBARA MISSION AND ITS BEAUTIFUL FOUNTAIN

the first mission was established, July 16, 1769. It is now absolutely, irrevocably in ruins, with the exception of the doorway.

Instructions had been given Serra to seek the harbor of Monterey and establish there a second mission dedicated to San Carlos Borromeo. The search of the priests and their escort for the bay led to the discovery of the hitherto unknown bay of San Francisco, one of the largest and best in the world. They had passed by the bay of Monterey without recognizing it. Later they returned, saw their error, fixed upon a site, and, Serra himself being with the party, he personally had the pleasure of founding the mission. A few years later, owing to the establishment of the *presidio* or fort near the mission, and the difficulty of controlling the soldiers in their relations to the Indians, Serra moved the mission into a beautiful valley, named Carmelo, some six miles away. This led to there being two mission churches at Monterey, both dedicated to San Carlos Borromeo. To differentiate them, the one in the present city of Monterey is called the "presidio church," and the one in the Carmelo Valley is popularly known as "Carmel Mission." The former was pictured in the June (1906) number of this magazine, page 139. "El Carmelo" is shown here with a glimpse of the bay and distant mountain range. This mission was Padre Serra's home, and here he died and was buried.

The third mission to be established was that of San Antonio de Padua. At the founding ceremonies, though not an Indian was in



THE MISSION OF SAN FRANCISCO DE ASIS

Often called "Mission Dolores," the latter word being the name of a former lake near by, which, as San Francisco has grown, has been drained, filled up and built upon

sight, Serra's enthusiasm was so great that, on the tolling of the bell (which was hung upon a tree), he cried aloud to the Indians to come and be saved. The building later erected here possesses a peculiar charm for me, though it is now in sad ruins, and, since the earthquake of April, 1906, it is, save in the corridors, almost beyond repair.

San Gabriel Archangel came fourth. This is the mission now reached by electric car from Los Angeles, and is, perhaps, the best known and oftenest visited in the whole chain. Yet architecturally it is far from being a typical mission structure. The extension of its front wall to the left, and the piercings therein for a bell tower, give a singular picturesqueness to it, and the square buttresses, of equal thickness from bottom



THE PICTURESQUE RAMBLING REMAINS OF SANTA INES



THE FACHADA OF SAN JUAN BAUTISTA

to top and standing equidistant, relieve the wall from any charge of monotony.

September 1, 1772, San Luis Obispo de Tolosa was founded. Here the *fachada** was pierced for the bells, but a recent "restoration" has totally destroyed this and other mission features, so that the structure has few old characteristics except on the inside.

Preparations were made for the founding of San Juan Capistrano, when an uprising took place at San Diego. The mountain Indians attacked the mission and several were killed, including Padre Jayme. As soon as the news reached San Juan, all work ceased, the bells and other paraphernalia were buried, and the priests hurried away, not to return until matters appeared more auspicious.

On September 17, 1776, the foundation of the presidio of San Francisco took place, and on

* In speaking of these Spanish built structures I prefer to use the Spanish *fachada* (pronounced *fah-tchah'-dah*), instead of the French *facade*.

October 9 that of the mission. The presiding minister was Padre Palou, Serra's warm friend and future historian.

It must not be thought, however, when I refer to the "founding" of the missions on certain dates, that these tell when the present mission structures were commenced. In some cases the first buildings erected were mere brush huts, in others, rude adobes, and not until later were the permanent structures we see to-day built. The old mission of San Francisco de Asis has had a wonderful history, and a few days ago, when I stood before it, the devastation of the earthquake and fire of April, 1906, surrounding me on three sides, the fine modern brick church standing by its side shaken to ruins by the earthquake, and the convent on the opposite side of the street completely swept away by fire, I could not help a thrill of rejoicing that it was still preserved. In the illustration the old church is seen with its newer brother towering on the right. Is it not somewhat of a reflection upon our modern methods of construction

that the old adobe building remains, while the new and pretentious one was so battered that it has had to be completely razed?

While Palou was founding San Francisco in the North, Serra was busy in the South, and on the first of November, 1776, San Juan Capistrano was established, the bells having been disinterred and the Indians attracted by their ringing to the solemn services. The unfortunate inception of San Juan Capistrano seemed to pursue it, for it had several misfortunes, the crowning one of which was the complete destruction of the church in 1812. It originally had seven domes over the main building, and a tower. The tower fell and crashed through one of the domes, killing forty-three worshippers. For years the six remaining domes were intact, until in the '60's of the last century they were blown up with gunpowder.

January 12, 1777, Santa Clara was founded, but it is so completely modernized and rebuilt as to have lost all of its original character.

Five years now passed, and not until March 31, 1872, was the mission of San Buena Ventura founded by Serra himself. When the building was erected, it was done in a most substantial manner, so that it has withstood the siege of hostile guns and earthquake without injury. In our illustration we see the *fachada*, all the arched corridors of the minor buildings having been swept away in the destructive zeal of one of its modern priests, whose trail of restoration wherever he went causes wailing and gnashing of teeth to lovers of the old structures which should have been *preserved* and not *restored*.

In 1784 Serra's work on earth ended. He died in June at Carmelo, and his bones now rest in the old church he founded and loved so well. His successor was a worthy and noble man, Fermin Francisco Lasuen, and on December 4, 1786, he established his first mission, that of Santa Barbara. The present structure was built after the earthquake of 1812 and was dedicated in 1820. If it were not spoiled as a typical mission structure by the Greek *fachada* it would be the most important building in the whole chain of missions. The illustration clearly shows this Greek



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THE FACHADA OF SAN BUENA VENTURA

feature, which will be fully discussed in a later article.



THE CAMPANILE OF THE RUINED CHAPEL OF PALA

Santa Cruz and La Soledad were both founded by Lasuen in 1791. The former has totally disappeared, and Soledad is in a condition past all repair. Little even can be done to arrest inevitable destruction which a few more rains and storms will undoubtedly cause.

For six years now there was a cessation in mission founding, then four were established in 1797 and one in 1798 as follows: that of Mis-



SAN LUIS REY DE FRANCIA

The most important mission structure in existence

sion San Jose came first, on June 10, but nothing save a small part of the verandahed monastery remains. June 25, San Juan Bautista was founded, the *fachada* of which is here shown. The same priest who "restored" San Buena Ventura erected a hideous wooden bell-tower between this building and the arched corridors of the monastery, altogether destroying the architectural effect and leading one to regret that his zeal was so far beyond his knowledge.

San Miguel followed, July 25, 1797. It is a plain and unpretentious building, relieved from the commonplace by the arched cloisters of the monastery. The interior, however, is the most important of all the missions, on account of its decorations being just as they were left by their priestly designers.

September 8, San Fernando Rey was established, Padre Lasuen performing the ceremonies assisted by Padre Dumetz. Some preservation work has been directed by the Landmarks Club upon the horrible dilapidation of this mission.

On June 13, 1798, was founded the mission which I regard, from the architectural standpoint, as the most important mission structure in existence. It is that of San Luis Rey de Francia, and is a glorious monument to the architectural skill of Padre Peyri, its builder. Even in its ruined condition it is still a kingly structure, and in spite of the incongruous wooden lantern recently erected at the rear. In a subsequent paper I shall show why this building is so important. Suffice it now that I make the statement that it is the only perfect type structure in existence.

In 1816 Padre Peyri founded, as an adjunct to this mission, the chapel or *asistencia* of Pala, the campanile of which is known throughout the world.

In 1803 Lasuen died, and to his successor Este Van Topis we owe the nineteenth mission, that of Santa Ines. It was founded September 17, 1804. The picture shows this mission with its great extension of arched corridors to the left, as it appeared some twenty years ago. Now more than half of these arches are gone.

In 1817 San Rafael was founded, but not a brick of it now remains, and the mission San Francisco Solano, at Sonoma, founded in 1823, is a modern parvenu, though the buildings adjoining the church are true mission structures.

Until the various decrees of secularization passed by Mexican Congresses and enforced by Mexican Governors from 1826 to 1846, the missions did their appointed work with more or less of success. It is sheer ignorance to say that they failed in their work. While it continued, it was immeasurably more successful than is our Indian policy of to-day. When the civil power, however, stepped in and took away all control of

financial and material affairs from the priests, decay began. Many of the missions were abandoned, all were pillaged, and many deeded away in payment of governmental debts, sold for a mere song, or given away to political favorites. These things account for their decay.

But they were not established in vain. The Padres helped the Indians wonderfully, and converted them into most useful and industrious people from a state of barbarism, and for us they have left an architecture that alone, in our great United States, has given to modern architects the basis for a new and original style that belongs purely within our own borders.

(To be continued)

A Seaside Garden

IN WHICH THE FIXED ORNAMENTS CONSIST OF FIGURE-HEADS FROM OLD AMERICAN MERCHANT SHIPS

BY KATHARINE P. PEABODY

PHOTOGRAPHS BY FREDERICK B. LITCHMAN

IN these days an American garden is hardly thought complete without its circular exedra, its classic porticoes and its white colonnades, backed by any native greenery that chances to resemble the cypresses of Italy. It is not always easy, however, to adapt the formal lines of Italian gardening to a New England yard, and the results are often incongruous with American scenery and American buildings. The accompanying pictures show a little garden which is near the sea, and though it has a somewhat formal arrangement and a circular shaded seat, is yet finished in a rude and picturesque manner that well accords with its marine surroundings and smacks of the neighboring ocean.

The approach is through an opening in a hedge of Californiaprivet,

and continues between beds of the rose garden. Four rough stone steps lead to a raised grass plot, bounded on two sides by a privet hedge and on a third by the tool house. An old spruce tree on

the right has been carefully tended, but is gradually succumbing to the violence of the north winds. On the fourth side the grass paths enter the flower garden and separate the beds which are walled in by a high hedge of privet. As far as is possible, the border beds shown in the plan have been filled with perennials, but annuals are planted among them where in August and September the columbines, foxgloves and other early bloomers leave bare places. The four beds in the middle of the garden are given up entirely to annuals and are bright with flowers from



ENTRANCE TO THE ROSE GARDEN



APPROACH TO THE GARDEN

June to October. The middle path leads directly between these beds and up six more rough steps to a semi-circular seat. This is shaded by a

trellis covered with vines. At each end and in the middle are figure-heads taken from dismantled merchant ships, the three supporting the trellis and doing duty as marine caryatides. The figure on the axis is from the "Western Belle," a vessel built in Bath, Maine, some thirty years ago. Once a proud clipper ship in the China trade, her hull finally became a coal barge, and is to-day ignominiously towed from port to port. Her figure-head was then discarded and later rescued from a ship chandler's shop in New York. It may well have been the portrait of the captain's sweetheart, carved by the down East artist with a painful accuracy. She is a buxom young woman in a flounced *decolleté* dress of the early sixties. Her straw hat with wheat adornment is falling off her head, her necklace and bracelet match and she carries her handkerchief in a reticule. There is nothing conventional or ideal about her, except her head, which is modelled after that of the Venus of Milo and which is posed on a figure strictly copied from nature of a rather breezy type.

The other two figures had been so long in the



THE GARDEN SEAT

shop where they were found that their origin was almost forgotten. It is supposed, however, that the right hand one came from the old Nova Scotian bark "Marie." This is perhaps the best in workmanship of the three, the folds of her draperies being modelled with the firmness and freedom that show the touch of a master in ship carving. Unfortunately, she had been more buffeted by wind and wave than the others before she was transported to this quiet haven; and not only are her nose and chin much disfigured, but her right arm has never been found. The third figure is evidently, from its state of decay, by far the oldest of them all. It represents a woman. Full of motion, with streaming hair and advancing stride, she seems about to step off the prow. In her right hand is what, on close inspection, seems to be a bunch of arrows, which may indicate that she once ornamented the bow of the old clipper "Indian Princess."

This entire arbor is nearly covered with vines, Dutchman's pipe (*Aristolochia siphia*), crimson ramblers, whose blossoms brighten it in early summer, and clematis paniculata, decorative while



THE "INDIAN PRINCESS"



THE "WESTERN BELLE"



THE "MARIE"

flowering, and also in its feathery old age.

Matrimony vine (*Lycium barbatum*) also climbs over the trellis in abundance and is one of the most satisfactory vines for the New England climate, as no conditions of weather seem to daunt it. Its rapidity of growth is very gratifying. On either side of the steps leading to the arbor hollyhocks form the background of the beds. In front of these are a row of blue delphiniums and a border of yellow coreopsis, which all bank effectively against the green vines and the gray figures. The sun-dial in the southern end of the garden continues the nautical scheme, being a fluted mahogany binnacle stand with the dial set where the compass once swung. The motto reads:

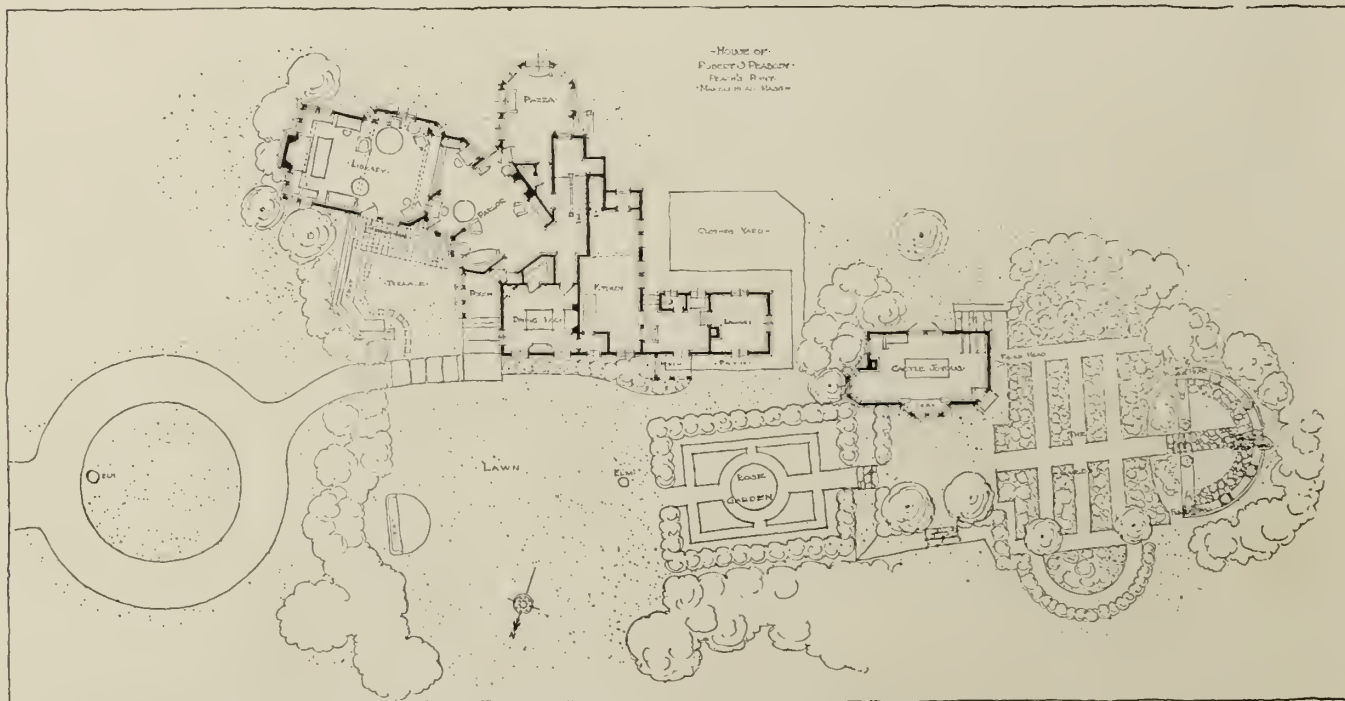


THE "TAMERLANE"

*"How noiseless falls
the foot of time,
That only treads on
flowers."*

The gable of the tool house, also entirely covered with matrimony vine, is surmounted by an eagle from the bow of an old ship. Perhaps the most interesting of the collection of figures is the head from the "Tamerlane," under the gable of the house door, which represents the warrior himself carved in no mean manner. This vessel was one of that great fleet of whalers which once brought fame to New Bedford. She is eulogized in Mr. Bullen's "Cruise of the Cachalot."

The plan shows the garden, its approach and its relation to the house. The latter, through repeated additions, has become very picturesque.



PLAN OF THE SEASIDE GARDENS AND THE HOUSE

Waterside Bungalows and Boathouses

CONTRIBUTING TO PLEASANT AQUATIC LIFE DURING THE WARM MONTHS

BY EDWARD W. GREGORY

FROM the midst of business cares rises overwhelmingly the desire to get away from crowded streets, from the stress and turmoil of city life, to some quiet haunt by river, lake or sea. Who would not, for a time at least, indulge himself in a simple life, nearer to the great heart of Nature than is possible to the dweller in town?

To camp out under canvas in the woods, with all the entrancing discomforts of such a life, is to many an ideal way of satisfying this remnant of a primeval instinct. But it is not given to everyone to enjoy this, and there are rainstorms and other things.

A more permanent holiday home that shall combine a larger degree of comfort and convenience with open-air life and the freedom from convention is often desired, and is to be found *par excellence* in the riverside bungalow.

One of the most pleasing features of a river or lake trip is the sight of these little bungalow dwellings, with boat accommodation under or adjoining, which, half hidden among the trees or tucked away in some shady backwater, speak eloquently of a most delightful phase of holiday life. Of all sizes, from the well-nigh palatial structures with boathouses elaborately fitted to the modest frame cottage having a mere dug-out creek to take a dingey or canoe, all have their own particular charm and interest.

An old railway or street car stripped of its interior fittings and divided by wooden partitions into living and sleeping rooms (the latter being arranged with bunks like a ship's cabin) makes a convenient and comfortable little dwelling, but it has the disadvantage of being entirely out of harmony with its surroundings, and of appearing an eyesore rather than a thing of beauty. There is no reason why the smallest and most inexpensive bungalow should not be a truly artistic creation, comfortable within and picturesque without.

THE PLANNING OF THE BUNGALOW

The detailed arrangements of a bungalow must vary with the situation and climate, but, generally speaking, it is a one-story building, planned to obtain the necessary accommodation

without waste room in passages and stairways, and fitted with generous verandas and deep bay windows. While securing complete comfort it must also retain that feeling of rusticity and ease so greatly to be desired.

A favorite plan is to have one large living or sitting-room, around which the bedrooms are grouped, the kitchen being placed at the back. The large room usually opens upon a veranda overlooking the garden and water, and has French windows so that practically the whole side of the room may be thrown open.



A RIVERSIDE BUNGALOW ON A PRIVATE ESTATE
With the table set for tea

Some small bungalows have merely the large lounge and a couple of tiny sleeping apartments at the back, the cooking being done in the open air as in a camp. One or two of those illustrated are of this type.

CONSTRUCTION

The bungalow may be built of almost any material under the sun. Some I have seen are of the flimsiest character, relying apparently upon the external paint and internal papering to keep them together. If, however, as is often the case, the bungalow is to be the week-end country residence for the greater part of the year, with

The partitions dividing the various rooms may also be of studding plastered on both sides; and for the prevention of sound it is desirable to fill in between the studs with slagwool or asbestic cotton which adds greatly to the fire-resisting qualities of the building. There are, of course, innumerable patent materials for thin partitions, claiming to be sound and fireproof, but most of them are more costly than the simpler methods of construction. The floor should be laid with cement concrete to prevent damp ground air rising into the rooms, and when this is thoroughly dry, the floor-boards well tarred underneath may be nailed direct to the concrete.



A BUNGALOW AND BOATHOUSE COMBINED

Affording a delightful spot for recreation on the lawn of a villa.

The living-rooms open upon a broad balcony overlooking the stream. In the boathouse portion below there is dry accommodation for skiffs, punts and a launch

two or three months full occupation in the summer, it must be substantially built of whatever material is chosen.

Perhaps the cheapest and most satisfactory method is to construct the walls of studding lined outside with weather boarding, similar to the frame houses so common in many country districts. If two thicknesses of weather board are used with a layer of tarred paper between, and the inside of the walls is lathed and plastered, a weather-tight result may be ensured.

The roof may be covered with tiles, slates or any ordinary roofing material. If corrugated iron be used, provision must be made by boarding and felting for keeping out the extreme summer heat and winter cold. The iron should be painted dark red or green for the sake of appearance; but at best it is the least attractive of roofing materials.

Foundations and lower parts of the walls should be of brick or stone, as well as the fireplaces and chimneys. Local usage might decide which material is most suitable to the district.



A BUNGALOW OPEN TO THE STREAM

Bedroom and kitchen accommodation is at the back. The miniature lighthouse is a quaint feature and serves as a guide to boats approaching the landing at night. The light itself is a small gas jet



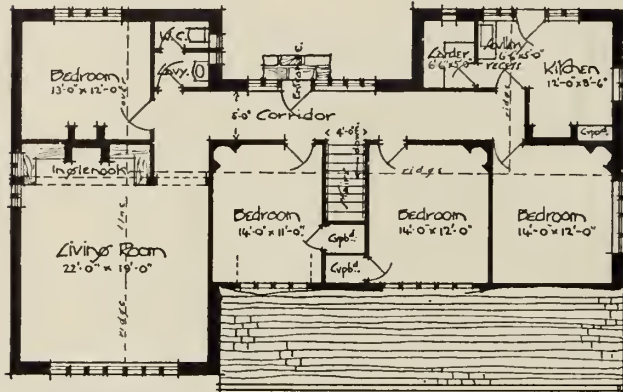
A BUNGALOW SECLUDED BY A COPSE

The building has grown by various additions representing several floor levels

A charming bungalow has recently been built in a well-known boating resort, the lower portion of the walls being of rough rubble stone dug from the site and set with wide joints. Above this the

walls are constructed of old railway sleepers fixed vertically nine inches or so apart, with the inter-spaces lathed and roughcast. In this case the roof is thatched with reeds, and the whole effect, simple and broad as it is, is such as a painter might rejoice over.

DESIGN FOR A RIVERSIDE BUNGALOW



GROUND PLAN



PLAN OF VERANDAH

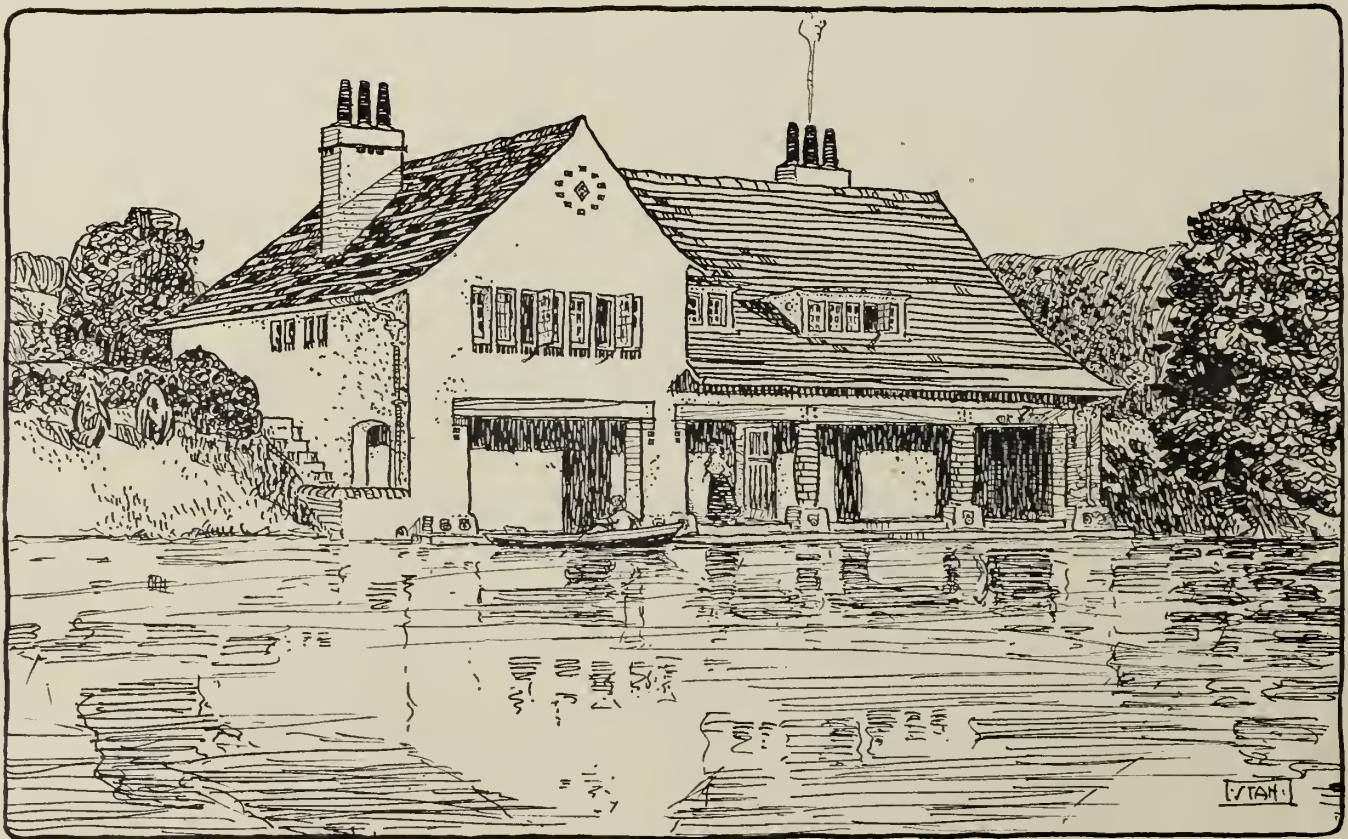
THE COMMODIOUS PLAN OF THE BUNGALOW SHOWN BELOW
Designed by Stanley T. J. Mobbs, Architect

DECORATION AND FURNISHING

In the decoration of the bungalow individual taste has its opportunity. It may be remembered that the simpler decorative effects are most suitable for this kind of dwelling, and that white paint is cheap and harmonizes with everything. As the bungalow is preëminently a summer house, the furniture should not be heavy or elaborate. Simple bamboo or wicker chairs, with multitudinous cushions, oak tables, pleasant hangings and rugs on the stained and varnished floor, with a few etchings on plainly tinted walls will give genuine artistic character.

THE BUNGALOW GARDEN

Where a number of small bungalows adjoin on a riverside, some most brilliant effects are often obtained by clever gardeners.



A RIVERSIDE BUNGALOW WITH "ALL THE COMFORTS OF HOME"

Intended to be built of brick covered with roughcast. Containing 27,320 cubic feet. Approximate cost, \$3,200



A BUNGALOW FOR BOATS

*Designed by Squires & Wynkoop, Architects**The second story under a picturesque thatched roof devoted to a spacious billiard room and veranda*

The various inhabitants seem to vie with one another in the production of perfect blazes of colors in their flower beds. Roses are trained up the veranda posts, hanging ferns swing in the arches, and the little strip of turf is rolled and mown until it is fairly velvety in its trimness and elasticity. Quaintly decorative mooring posts, such as form so striking a feature of the Venetian canals, add to the interest of the boat landings.

THE COMBINED BUNGALOW
AND BOATHOUSE

A most picturesque adjunct to a large riverside villa may be made by having a suite of rooms over the boathouse.

The lower half of the structure, solidly built, has gates opening upon the

river. Inside is a floating dock with the necessary rollers and slings for dealing with the boats.

The boating man will see to it that all hooks and bearers for sculls, paddles and the varied impedimenta of aquatic sport, are well fitted and out of the reach of sudden freshets. The rooms



A LOG BUNGALOW AND BOATHOUSE BESIDE A LAKE



C. A. Blackall, Architect

A SEASIDE BUNGALOW



A COMBINED BUNGALOW AND BOATHOUSE

In the chalet style. Below the living-rooms and their balcony several skiffs and a large electric launch are accommodated

above make delightful tea rooms, while the overhanging balcony is the pleasantest of places in which to while away an afternoon with a book.

Should these rooms be used for living or sleeping, special precautions must be taken to prevent damp rising through the floor. A useful method is to lay thick linoleum directly on the floor joists, over which the floor boards are then nailed.

On the whole, one may wish no greater good to a keen fisherman or ardent boating man or woman (if so fiery an adjective may be permitted in so watery a conjunction) than to spend a summer holiday in a well designed riverside bungalow; while to the mere seeker after *dolce far niente* the life will be found idyllic.

PERIPATETIC BATH-TUBS. — Several bathing establishments in Rheims and in other French cities have portable bath-tubs, which are placed on two-wheel vehicles provided with a large iron boiler filled with hot water. As orders for baths to be delivered at the doors of the residences are received, the boilers are filled and the bath-laden vehicles, each pulled by two men, start out for the delivery. The bath-tub is

filled with the hot water and carried into the residence; and while the family bath is going on, the vehicles may fill another order, returning again for the tub, which is in regular commission as a visitor to the residences throughout the city. The price of a delivered-at-your-residence-bath in Rheims is thirty cents, while at the public bathing establishment it costs twenty cents.

The Evolution of the Bungalow in California

ILLUSTRATED WITH ADDITIONAL EXAMPLES OF THE CHARMING ONE-STORY DWELLINGS
OF THE GOLDEN STATE

BY M. H. LAZEAR

[Concluded]

THE variety of plan both inside and out is unlimited. Smaller houses are generally designed by their owners and the individuality manifested is the greatest charm of these buildings. Almost every new bungalow will show some original feature which brings you up with a gasp of surprise and delight: a window carefully planned to frame a beautiful view; a new solution of the problem of reducing work to a minimum; some cheap material with artistic value used as curtains or as wainscot paneling, as a twelve-cent silkoline with a bold design of red poppies stretched over muslin to give it substance made



A VERDANT ENTRANCE TO A BUNGALOW

a most successful frieze in a house I have just seen. A low brick terrace in front, gables and casement windows give an English cottage effect that is charming, and such a house as this will run to dimity inside.

The California style affects boldness and will use small rocks for steps or terrace or fireplace, and sheepskin leather curtains and cushion covers. One exquisite house recently built by the representative of an old Spanish family I cannot fail to mention. The quite small rooms are arranged with an odd irregularity, each one contrived as a sort of shrine for a particular group of interesting



A SANTA BARBARA BUNGALOW WITH TERRACE AND PERGOLA



A NEW BUNGALOW IN SOUTHERN CALIFORNIA

family relics. The woodwork and furnishing were modern; but the small rooms without doors and many recesses gave a reminiscence of Pompeii.

In the next grade of bungalow the walls are plastered, either inside or out, or both. This is much more expensive, especially if it is not at first done in the most thorough way, as cheap plaster is always getting out of order. Its greatest recommendation is that it deadens the sound between the rooms. Bungalows, alas, are usually mere whispering galleries, which can only be partially modified by making the partition walls all closets. A closet two or three feet deep across the whole of the dividing wall, if lined with paper, will enable one to be decently dis-

INTERIOR OF THE BUNGALOW SHOWN BELOW
The Dining-Room

A PASADENA BUNGALOW

creet in regard to the conversation in the next room.

THE ADOBE BUNGALOW.

I have purposely left to the last what I consider to be the ultimate ideal for the construction of one-story houses, because to the carpenter-housebuilder of the first period of California architecture it was anathema. They found in this country the most suitable, artistic and hospitable homes, but

they were of "Dago" construction, mere mud huts not to be mentioned in connection with any white man. Unfortunately, the "adobe" houses in California were not very carefully built, in fact, they were the adobes of an outlying and pioneer society. The unburned clay bricks were frequently laid directly on the ground, without any foundation worth mentioning, and this kind of wall draws up the moisture from the soil by capillary attraction. To

the carpenter their chief defect was that they were not made of wood. The occasional artistic health-seeker was told that they were damp. This settled their fate for many long years, and these beautiful dwellings were eradicated with the angry energy with which the Russian thistle is now being attacked. The truth is that the adobe, placed on a stone foundation rising at least a foot above the level of the ground, is drier than a stone, brick, cement or plaster house, unless built with an air space within the walls, as it does not condense moisture on its surface in cold weather. It is cool in summer, warm in winter; it does not crack or grind in every wind storm; the inside adobe plastering, entirely untreated with lime or kalsomine, makes the softest and most becoming background; and the outside walls, coated about every three years with a heavy oil and protected by eaves, are absolutely rain-proof. Adobe plastering, properly put on, does not crack with changes of temperature, as is the case with ordinary plastering in wooden houses and is not affected by earthquakes, while an adobe wall has an elasticity and homogeneity which will make it stand in a severe earthquake where a stone or brick wall will have crumbled away; and at the same time it is the best of all walls for deadening sound.

BUNGALOWS WITH PATIOS

Very lately many of the old adobes have been restored and two or three new ones have been built by *los gringos*, and there is



A BUNGALOW OF ATTRACTIVE DESIGN AT SANTA BARBARA
An ample veranda skillfully arranged within the outline of the structure

a strong reaction in favor of the adobe ground plan. Many small bungalows have tiny courts or patios, filled with asparagus fern, begonias and the more delicate flowering plants; and some large houses have a double patio, one enclosed on three sides in front and an inner one entirely surrounded by the building.

This is undoubtedly the right style of house in this climate where one should live out of doors



THE RUSTIC FIREPLACE OF A BUNGALOW LIVING-ROOM, AT SIERRA MADRE
The furniture of the room is of Mission type and the decorations consist largely of Indian articles



A TYPICAL ADOBE BUNGALOW

as much as possible; scarcely any one even attempts to carry on a daily avocation in an ordinary city garden, or even on the exposed city piazza, while in the inner patio one can work, eat and sleep with perfect seclusion.

UTILIZING THE ROOF

There are a few indications of another improvement much to be desired in American city houses. New York has learned the advantage of the flat roof, so long the custom in Spanish architecture, and many theaters, cafés and children's playgrounds have been introduced there. Un-

fortunately, so far, the small houses which have been constructed in this way have foolish little balustrades two or three feet high which leave the person who might wish the advantage of this resort entirely exposed to the public gaze. Any one who will study a photograph of the roofs in southern Spain will see that by changing the levels of the different parts, walls five to ten feet high may be obtained and absolute seclusion secured; a five-foot wall in the direction of the greatest outlook often having a very wide bench which can be used as a lounge or bed or foot-rest for those sitting at night on top of the wall to



A BUNGALOW APARTMENT HOUSE OF TWELVE ROOMS

enjoy the full sweep of the wonderful summer sky. A board bungalow plastered on the outside can easily reproduce this beautiful and most enjoyable feature of Hispano-Moorish architecture.

I have only been able to give a sweeping glance at so large a subject as the one-story California home, but hope that I have shown that each individual can construct for himself a shell that fits his personality in a way that no conventional architecture will admit of, and at a price within the limits of the smallest purses, — of such as can afford a house at all. And the



A BROAD-EAVED PASADENA HOME

individual who can express himself in his environment is greatly developed by the process, — happier himself and more interesting to his neighbor.

A \$200,000 Log Cabin

AFFORDING EVERY COMFORT TO VISITORS TO THE WILDS OF THE YELLOWSTONE

THE idea which the name "log cabin" carries with it is rough simplicity and small expense. Misguided persons have in the past erected log cabins in or near metropolitan districts, and have been appalled at the cost. There is a case of this kind in Massachusetts, where a gentleman erected a log cabin, then found himself obliged, practically, to build a frame house inside that, in order to make the home livable.

Perhaps, in all this country, the most costly and by no means the least comfortable log cabin, properly so-called, is the Old Faithful Inn in Yellowstone Park. To quote the words of another, — "It is the creation of an architectural genius. Whatever Mr. Reamer, its designer, may have done previously, or may do hereafter, or whether his own name may

be known throughout the world, he certainly will be known, at least indirectly, by this product of his brain, for it is probably no exaggeration to state that the like of this unique structure in the wilderness does not now exist elsewhere, and it is undoubtedly the prototype of numerous similar structures that



ONE OF THE PICTURESQUE WINGS OF THE "OLD FAITHFUL" INN

will trace their conception to Old Faithful Inn."

In spite of the difficulties which the designer must have encountered, the construction of the Inn is a distinct success, and is nearly as great an advertisement for Yellowstone Park as is the great geyser, near which it stands, and from which it takes its name.

There is a harmony of design and execution in its construction, that is nothing less than mar-

is not in the least a ramshackle or rambling affair, appropriate to its locality simply because the locality is a peculiar one, but is a thoroughly modern and artistic structure, both in its appointments and in the carrying out of an unconventional scheme. It may be stated in this connection that the Inn and its furnishings required an expenditure of nearly \$200,000. There are electric lights and bells, unique room furnishings, perfectly in keeping with the surroundings; floors are cov-



THE VERANDA FORMS A PORTE COCHÈRE AND ABOVE IT ARE TIERS OF DORMERS

velous. Reduced to its lowest terms, the building is constructed of boulders and logs, which description utterly fails to indicate the quaint appearance and sturdy, comfortable atmosphere of the Inn.

Wherever it has been possible, the freaky, abnormal tree growths and irregularly formed limbs have been worked into the construction of the building with most original effect.

It must be distinctly understood that the Inn

ered with rugs; there is steam heat, excellent fire protection, and broad, massive porches with rustic seats and swings. The Lounge, or Office, is a most extraordinary apartment. The arriving tourist rarely fails, upon entering this hall, to stop and gaze about, open-mouthed, in wonder and amazement. This Lounge is seventy-five feet square, and in the center eighty-five feet in height. In one corner there is an enormous chimney, fourteen feet square, constructed of lava blocks, and



THE UNIQUE LOUNGE



RUSTIC GALLERIES FOLLOWING THE RUGGED CHIMNEY TO THE ROOF

BOSTON
PUBLIC
LIBRARY



THE VERANDA COMMANDING A VIEW OF THE GEYSER

containing eight separate fireplaces. A massive, iron-frame clock is attached to one face of it, and behind it is the writing-room. In the fireplaces, fires of huge logs are constantly burning, and a curious feature of entertainment is a swinging corn popper of Brobdingnagian size, filled every evening, and its snow-white contents distributed among the guests. This great central court is surrounded on three sides by balconies of logs,

three stories in height, and there are many smaller balconies above, and at the very point of the roof is an open log hut room, in which one may sit and look down upon the guests in the hall below. The dining-room is a very large high room, with a trussed ceiling, and contains another immense lava chimney and fireplace. It is lighted by big plate glass windows, from which the eruptions of the Old Faith-

ful Geyser may be observed. Some of the bedrooms are unfinished and show the log construction, while others are of natural, unplanned pine. All of the furnishings in the Inn are of the Arts and Crafts style. The disadvantages of the long, sloping roof are obviated by banks of dormer windows, which present a curious effect, and the main veranda is raised many feet from the ground, on columns of short, criss-crossed logs. The lighting effects are very interesting, and are produced by imitation candles, stuck into the limbs of trees, with electric bulbs at their tops. The chandelier in the dining-room is a sort of a log raft, suspended from the ceiling by chains.

On the top of the hotel is an open observatory, and at night a searchlight is operated from the platform, showing the geysers in operation. The rays of this searchlight have not infrequently fallen upon the forms of bears prowling about at the edge of the woods.



ONE OF THE RUSTIC BEDROOMS

A Club-Women's Palatial Home

THE NEW STRUCTURE OF THE COLONY CLUB, AN ORGANIZATION RECENTLY FORMED
BY PROMINENT WOMEN OF NEW YORK

BY FLORENCE FINCH KELLY

THE latest word in clubdom has been spoken by the Colony Club of New York City, an organization of women, whose home was completed and opened for occupancy about the middle of March. The club has been in process of formation for the last three years, and now starts existence in its new and fully equipped clubhouse with a well formulated plan of social, athletic, literary, artistic and musical activities which makes it unique among the clubs of this country, whether for men or women.

The basic idea of the club is to unite in one organization leading women in the business, the social, the artistic, the literary, the theatrical worlds and to give them a club home where they can enjoy social pleasures and athletic privileges and which shall be also a literary and artistic center.

The clubhouse, occupying a plot one hundred by eighty feet, is on the west side of Madison Avenue, just above Thirtieth Street. The building, which is six stories in height, of Colonial style—in harmony with the club's name—was designed by the late Stanford White, and shows in its general effect that combination of solidity and graceful delicacy characteristic of his work. It is built of grayish red brick, the bricks all laid crosswise of the wall in gray mortar, so that the color effect becomes gray faintly tinged with red. At right angles to the entrance hall, through the center of the building, is a reception hall, wide and long, with a fireplace at one end. Opening from this hall toward the front of the house is the library, whose walls are finished in a delicate shade of grayish blue, and on the other side is a large tea room

with trellised decorations. Ivy twines all over the lattice, a fountain at one side is surrounded by plants, there are moss green curtains at the windows and moss green rugs on the floor. Beyond is the card room in Colonial buff and blue. But cards will be enjoyed by the members of the Colony Club only as a social game. Playing for money stakes is forbidden by the by-laws of the organization.

There are only certain portions of the house to which men may be admitted, as guests of members. Then there is a separate entrance for them and they are taken in the "strangers' elevator" to the "strangers' dining-room" where they may be entertained at luncheon or dinner. Afterward they may be brought down to the trellis room where they will be allowed to smoke.

Across the front of the house on the second floor is the assembly room, a spacious apartment, two stories in height. The gilt, spindle legged, eighteenth century furniture is upholstered in red brocade, the carpets and window draperies are red and the walls are finished in French gray.



THE FAÇADE OF THE CLUBHOUSE
Showing the walls of bricks with their ends exposed to the street



THE MAIN HALL

THE ASSEMBLY ROOM
With balcony for musicians

Masses of red azaleas glow in the corners. There is a deep, wide fireplace at one end and at one side a balcony for musicians. This room will be used for lectures, concerts, art exhibitions and general assembly purposes. It has been arranged so that, by putting in a stage across one end, it will serve as a theater. Members can engage it also for dances.

Across the back of the house on the same floor is the gymnasium, a large, airy and well-lighted room, two stories in height and measuring about seventy-five by thirty feet. In the balcony is a running track, and on the main floor are punching bags, rowing machines, horizontal bars, flying rings and all the paraphernalia of a thoroughly equipped and up-to-date gymnasium. There are also squash and basket ball courts. The organizers of the club have paid especial attention to athletics, and apparently this will be among the most important of the club privileges.

The kitchens and dining-rooms are located at the top of the house. The front part of the roof is arranged as a roof garden and summer dining-room. On the sixth floor is a private dining-room, *en suite*, with a reception room in which the hostess can receive her guests for a dinner party. The decorations here are in French gray and old rose—the walls covered with a panelled gray paper, and the carpet, curtains and upholstery in rose. The members' and strangers' dining-rooms on the fifth floor are in green and white. A woman chef heads the kitchen force, but the house service includes both men and women.

Ten bedrooms are at the service of members with a limit of two weeks upon occupancy.

In the basement are the swimming pool and the baths. The pool is the particular pride of the club and is a very beautiful and luxurious achievement. It is about seventy by twenty feet and the depth of the water is graded from three to twelve feet. The ceiling of ground glass is covered with a lattice. Grapevines are twined thickly over the lattice, their broad leaves and big clusters of fruit forming a most natural look-



ONE OF THE BEDROOMS

ing arbor. Electric lights are arranged above the glass ceiling in such a way as to send through it and the vines a soft yellow light, like sunlight filtered through foliage. The walls are all lined with mirrors which create an amazing effect of spaciousness. As one glances about the room the single pool is multiplied many times and the eye looks down a long vista of vine-covered, sun-lighted arbors and marble basins. Hair dressing and manicure rooms are also located in the basement, as well as a very complete equipment of Turkish, electric, Russian, and curative baths.

In every part of the house one runs upon little distinctive touches of decoration or arrangement. Now it is a box in the window of a stair landing filled with dwarf greenery; again, a leather-covered seat built around the hearth of the library fireplace; ungainly radiators disguised and converted into pedestals for masses of blooming plants; deep, uniquely fashioned window seats; odd and pretty little shades or dominos for tempering the glare of electric lights. All of these are the result of the ingenuity and taste of Miss Elsie de Wolfe who has had entire charge of the furnishing, decoration and arrangement of the interior. Miss de Wolfe left the stage two or three years ago to take up the profession of interior decoration and has devoted a goodly share of that time to work upon the club house.

It is noteworthy that throughout the building she has depended almost entirely upon simple and inexpensive materials. The assembly room,



THE LIBRARY AND READING-ROOM

BOSTON
PUBLIC
LIBRARY

A PRIVATE DINING-ROOM



THE TEAROOM WITH TRELLIS-WORK DECORATIONS

where the upholstering and the window draperies are of brocaded silk, is the only exception. Where curtains against the glass are used they are of thin China silk, white in many of the rooms, green in the trellis room, old rose in the private dining-room. The long draperies sweeping over these from the top of the window are sometimes of linen taffeta lined with white and having a border of embroidery in soft, harmonizing colors; sometimes, as in the bedrooms, of flowered chintz. But always the material is simple and the effect artistic. It was Miss de Wolfe also who designed the finish and decorations of the trellis room and the grape-arbor effect and the lighting of the swimming pool. She spent much time and effort in getting together the furniture so that it should all be in harmony with the ideas of Colonial times. In the case of the black lacquer bedroom set she found one chair at an auction and had all the rest of the set made to match it. The wall paper of

one of the bedrooms, showing cardinal birds hopping about on slender tree boughs, she had made from her own design.

The initiation fee of the club is \$150 and the yearly dues, \$100. The membership is limited to seven hundred resident and two hundred non-resident members and its lists are already almost full. In addition to these there will be a certain number of junior members, young girls from fourteen to eighteen years of age, belonging to the families of members, to whom will be granted the athletic privileges of the club. Many of the names prominent in its leadership and government are those of women well known for their wealth and social position. Mrs. J. Borden Harriman, daughter-in-law of E. H. Harriman, was the originator of the idea of the club and is its president. Miss Anne Morgan, daughter of J. Pierpont Morgan, is the treasurer. Mrs. Clarence Mackay, Mrs. John Jacob Astor, Mrs. Henry



THE SWIMMING POOL SURROUNDED BY MIRRORS

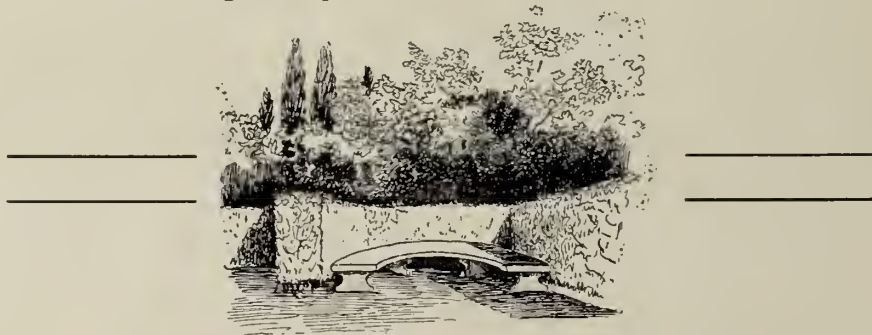
Clews, Mrs. Cornelius Vanderbilt, Mrs. Ogden Goelet, Mrs. P. Cooper Hewitt, Mrs. J. Pierpont Morgan are among the club's members and prominent in its affairs. Equally prominent with them are the names of many women well known for their success in business, art or literature, or upon the stage. Among these are Miss Elisabeth Marbury, perhaps the most successful and most widely known business woman in New York; Miss Jeannette L. Gilder, for years editor of *The Critic* and now one of the editors of *Putnam's Monthly*; Mrs. Kate Douglas Wiggin, Miss Elsie de Wolfe, Mrs. Reginald de Koven, Mrs. Walter Damrosch, Miss Maude Adams and Miss Ethel Barrymore. In the list of non-resident members appear the names of Mrs. Potter Palmer, Mrs. Nicholas Longworth, Mrs. Roger Walcott, Mrs. J. Ogden Armour, Mrs. John R. MacLean.

The financing of the club involved an investment, including the land and building, of about half a million dollars. While the greater part of

this has been done by the ladies themselves, they have had also the coöperation and advice of an advisory board of men, consisting of Messrs. Charles T. Barney, J. Pierpont Morgan and Frank Polk. Mr. William Turnbull also gives advice and help as assistant treasurer.

Among the plans of the club, in order to carry out the idea of making it a literary and artistic center, will be the holding of afternoon meetings on Tuesday of each week, at which there will be informal addresses and discussions. One of these will be devoted to

literary topics, when people of distinction in literature will be invited to make the address. On another day there will be an exhibition of laces, paintings, miniatures or book bindings, and it is the intention of the committee having the matter in charge to give to young artists an opportunity to show their work. Another Tuesday in each month will be devoted to music, when there will be informal concerts and talks on music. And here again the club hopes to be of practical value to young musicians whose work merits recognition. Still another Tuesday afternoon will be given up to conferences upon the various problems and interests of the day in politics and social science. The club hopes to find it possible to induce heads of city departments, men and women prominent in philanthropic work, state officials and others whose names stand for knowledge and authority in matters of government, politics and other public matters, to present the results of their observation and experience.



A House on a North Shore Hillside

THE PROPERTY OF DR. BENJAMIN TENNEY

DWIGHT & CHANDLER, ARCHITECTS

TO a Massachusetts resident no part of the coast of the Commonwealth offers so many attractions as a place of residence as the North Shore, from Salem to Cape Ann. In few places on the Atlantic Coast are the natural beauties of shore and country so closely combined. A house may be situated near enough to the shore for its occupants to be lulled to sleep by the murmurs of old ocean and yet be set in the midst of splendid trees and surrounded by lawns and shrubbery of that dazzling verdure which is only to be found where the foliage is breathed upon by the damp, salt air from the sea and is yet protected from north and east winds.

Much of the land rises abruptly from the coast, not in cliffs but in natural terraces and the high land of the interior shuts off the storm winds, which, in a New England summer, are usually from that direction. The drives are unexcelled, with splendidly kept and comfortably shaded roads. Many of them run along the

coast parallel to it, giving delightful vistas oceanward. The houses are of every size and type, from the palace, costing hundreds of thousands of dollars, to the simple cottages and bungalows of the summer visitor who comes here merely for the warmest months. All-the-year-round homes are not lacking, and scattered up and down the coast are small towns with hotels and shops and clubs. In addition to all this the railroad is near, but not too near, at hand and frequent train service is maintained with the city of Boston at all times of year. The coast itself is irregular, with coves and bays, rugged rocks and smooth sandy beaches excellent for bathing purposes, although it must be admitted that the water is rather too cold, even in August. All summer long the prevailing southwest wind blows gently against the shore bringing comfort to the residents and dispersing the mosquitoes.

It is but a short sail to the famous yachting harbor of Marblehead and there are one or two



THE ENTRANCE PORCH FROM THE WINDING LANE.



THE PERGOLA-ROOFED VERANDA
Mingled sun and shade



THE ENTRANCE PORCH
Between masses of shrubbery





A CORNER OF THE MAIN HALL
Showing entrance hall and stairs

small yachting clubs at Manchester and Beverly. From Marblehead to Gloucester the inside course runs close to the shore the whole length of this coast and many races can be witnessed from the verandas of the houses near the shore. There are several islands off the coast, and inside their shelter the water is nearly always smooth and the sailing of small craft, rowing, and even canoeing, may be enjoyed.

In this article is illustrated one of the most charming of the newer North Shore houses. It is situated upon a steep wooded hillside facing the sun and the sea. In front and far below its windows is the main traveled road from which little of the house can be seen, so carefully is it screened by low trees and shrubs. The main entrance is opposite the highway side and is reached by a long lane which winds its way through the shrubbery and trees up the slope in the rear.

The treatment of the exterior of the house is in cement plaster left its natural tint. The heavy

beams that jut out under the overhanging sections and from the eaves are of cypress thoroughly oiled. The porch roofs, the pergola top of the veranda and all the other exterior woodwork is treated in the same way. The shingled roof is stained a deep tile red, which contrasts with the tint of the walls and the green of the shrubbery. The windows are heavily leaded casements and swing out upon their hinges to let in the sea breezes.

The entrance to the house is through an entrance hall raised higher than the main floor of the house and from which start the stairs to the upper floor. The main hall is designed as a living-room. There is a great fireplace at the right and the front windows look out pleasantly upon the pergola. The woodwork of this hall, like the dining-room and stairs, is of cypress with wainscots of broad molded siding left in the soft natural colors of the wood, without oil or stain of any sort.



THE GREAT FIREPLACE IN THE MAIN HALL



THE COOL SIMPLICITY OF THE DINING-ROOM

At the western end of the house are the small reception room, the office and laboratory, all painted white. The spruce girders and crossers of the ceilings are left exposed, their color being slightly toned down with oil to harmonize with the rest of the woodwork.

The dining-room is charming in its cool simplicity. The service portions of the house are isolated and so arranged that they are lighted upon all sides and open to a cross draught for summer comfort.

The veranda is inviting in all weathers, with its mingled sun and shade, a delightful place for idling away the long summer days with a book, a field-glass and a congenially idle companion or two.

ATTACK ON THE BILLBOARD CRAZE.—New York has at last awakened to the curse of the outdoor display advertising and is beginning to realize the havoc that is being wrought by the untiring activity of the billboard men. Mr. Charles R. Lamb of the Municipal Art Society condemns this form of desecration in no measured terms. "The billboard craze," he says, "has grown to be, not a nuisance, but an outrage. Coming from Brooklyn to New York one is confronted by the most remarkable display of hideously colored signs. It reminds one of a gibbering idiot, a riot of chaotic and incoherent noise. At the present rate of progress there is no telling where it will end."

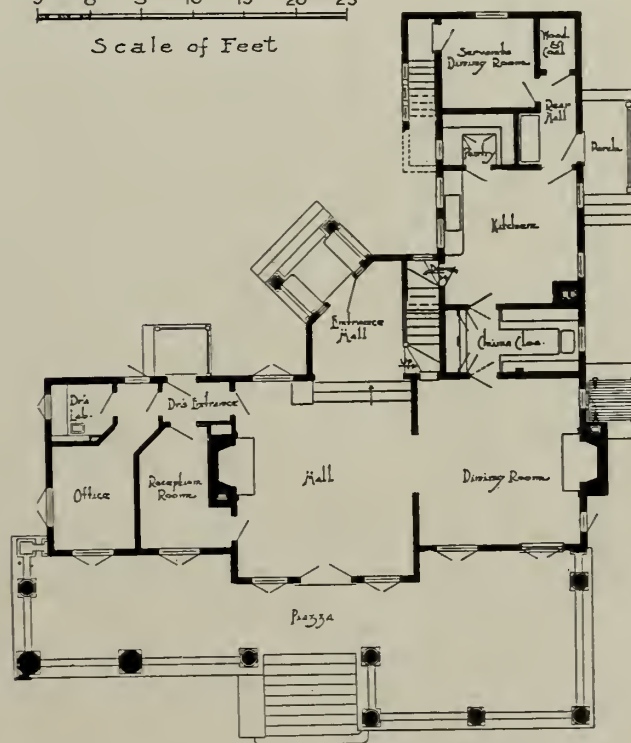
The present method of placing billboards is certainly an outrage, and one is affronted even more than confronted by their appearance in many places which should be sacred to art and beauty. Not in New York alone, not only in coming from Brooklyn to New York, though it must be admitted that all people do come from Brooklyn to New York as fast as they can, but in coming from anywhere to everywhere the first sight that assails the eye is a horrible concoction of cheap boarding and garish paint.

The New York *Herald*, after declaring that Madison Square looks like a crazy quilt, advocates an appeal to the Legislature at Albany. We believe that it will require state or, perhaps, national legislation to overcome this evil and the



SECOND FLOOR PLAN
Scale $\frac{1}{8}" = 1'0"$

5 0 5 10 15 20 25
Scale of Feet

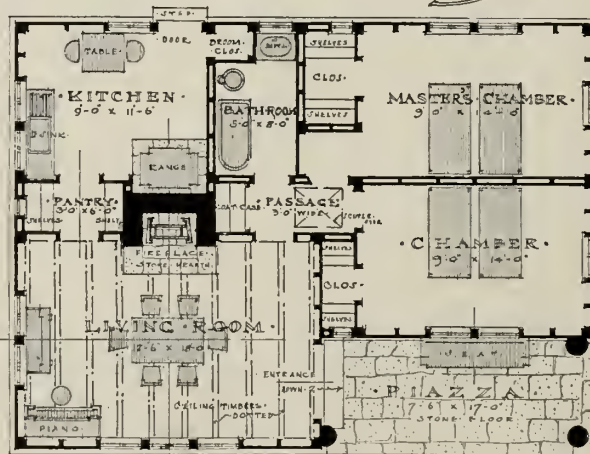
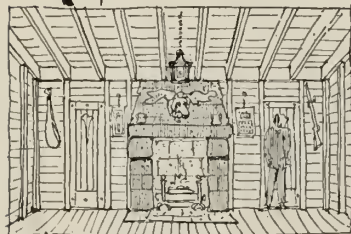
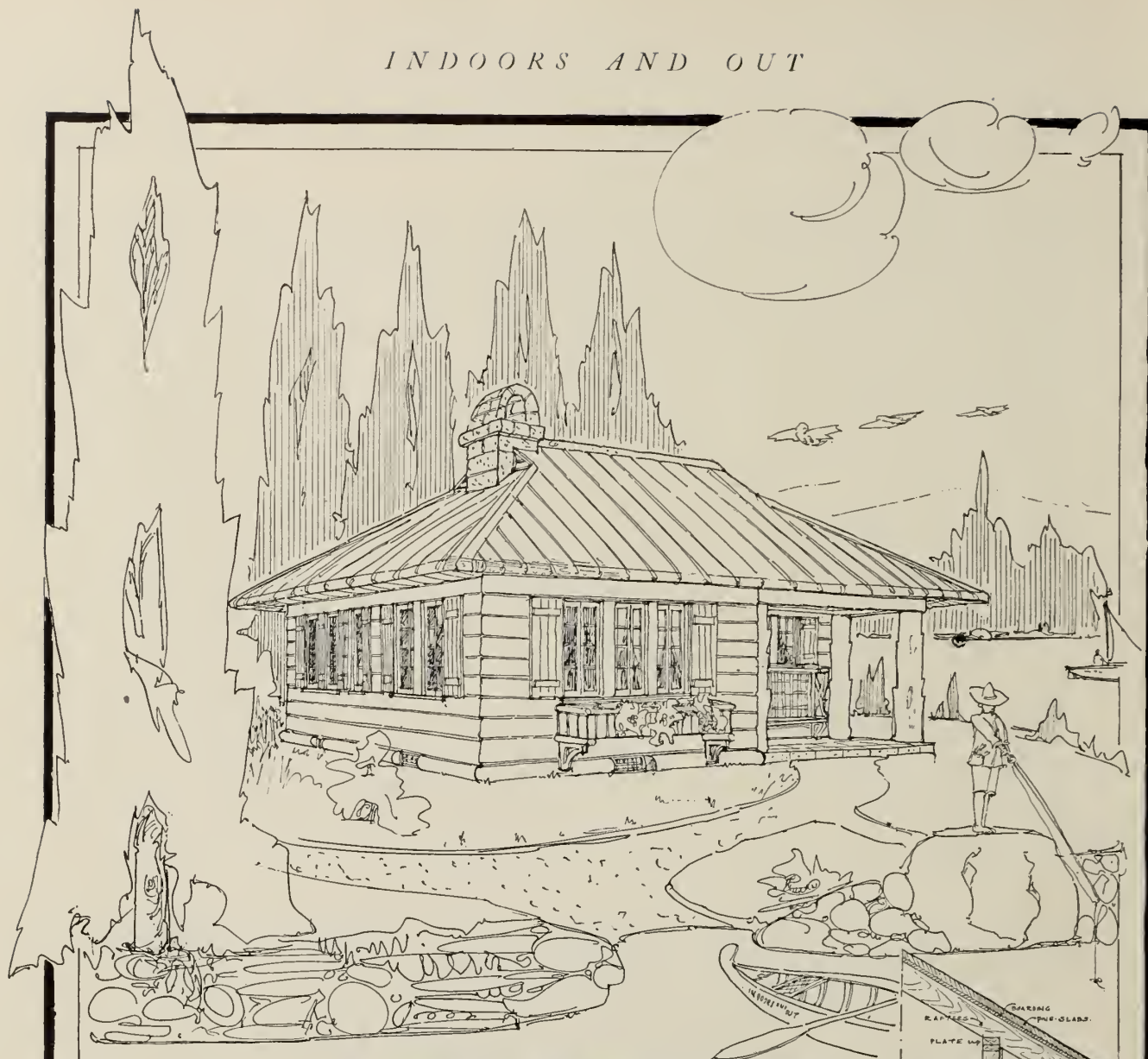


FIRST FLOOR PLAN
Scale $\frac{1}{8}" = 1'0"$

PLANS OF THE NORTH SHORE HOUSE

sooner active measures are taken in this direction the better for American scenery both natural and architectural.

I N D O O R S A N D O U T



GROUND · FLOOR · PLAN ·

SCALE 0 5 10 FEET

A · SHORE · HOLIDAY · BUNGALOW · SECTION ·

EXTERIOR-PINE POSTS AND SLABS-STONE CHIMNEY-INTERIOR-PINE AND STONE FIREPLACE.

• HOMER • KIESLING • ARCHITECT • BOSTON • MASS.



A Shore Holiday Bungalow

A DESIGN BY HOMER KIESSLING, ARCHITECT

MANY a family man of small means, who is himself held in town during the summer, has to confront the problem of providing a vacation abiding-place for his family. Let him not think it impossible to find a solution far from the city apartment, even though he must do so from a salary of \$1,200 to \$2,000 a year. A conventional house need not be attempted; and by "conventional" here is meant a house thoroughly constructed in all its parts so as to be weather-proof at all seasons. Let him essay that delightful type of house which is avowedly nothing more—nor less—than a bungalow. With the expenditure of some ingenious thought, and fewer dollars than would be supposed, may be had not only a useful but a beautiful possession.

Within twenty-five miles of most large cities is to be found land unfit for agriculture, perhaps, but entirely suited to the building of a rustic summer home. This land may be bought at a price as low as fifteen dollars an acre. Or, an ideal spot may be acquired by lease at a figure only to be compared with the sweetest notes of the proverbial song. A rocky knoll or stretch of shore is often judged useless for everything but the best use, the rearing of a home. Such a home the illustration suggests. It is an informal abode, dedicated to every wholesome pleasure, where Freedom sits as hostess, hospitable to all but Care.

At the outset economies must be faced. And in bungalow building this can be done without apology. An acre of land suffices, and if one border of that acre meets a sheet of water so much the better. Enough loose stone for the foundations, chimney, hearth and piazza floors may be taken from the ground without disturbing the nature of the place. Perhaps a tree or two must be felled to form the site; and, if so, the logs may be dressed by the axe only and used for the base-course running around the building at the floor level. Smaller tree-trunks will answer as posts for the piazza. If the felled tree is a white birch the bark should be saved for such decorative objects as flower-boxes. Board-

ing, wall studs, floor joists and floor of spruce may be bought of a local lumber dealer. The exterior walls and the roof can be of pine slabs such as the lumber camp casts aside as waste. The cost of these is small. On the roof they are turned down at the edges so as to give an effect of thickness and weight. The window and door frames and the sashes, bought at a local mill, may be oiled and left unpainted.

The piazza has a fine outlook and is well suited to outdoor meals. The living-room measures $12\frac{1}{2} \times 18$ feet, and on all sides between the studs are places for shelves to hold books and other innumerable objects contributing to summer pastimes. This room has a large stone fireplace with stone hood and hearth. The story height is $8\frac{1}{2}$ feet and the ceiling joist, being exposed, there is an apparent additional height of 10 inches. A pantry of ample size and a kitchen, filled with light and air, contribute meals to be consumed by that appetite which only outdoor life induces. The bathroom contains a tub, a water-closet and a wash bowl. Water is pumped into a tank above from the kitchen pump, which in turn is connected with a driven well. An underground drain leads to a tight well two hundred yards away.

From the living-room a passage, with space for coats and wraps, leads to the bedrooms. These measure 9×14 feet, and located as they are on the northeast side, will be flooded with the morning sun. Each accommodates two single beds, and this sleeping capacity may be increased by the use of an iron cot bed which is hinged at one side to the wall and is swung downward when not in use. Blankets of gay colors should be spread on the couches and bright Indian cottons hung at doors and windows.

Such a modest home for summer use is easily obtainable and easier to maintain. It insures a happy life to wife, children and guests for at least a third of the year, and purchases health for them to boot. It provides the husband who builds it with many joyous and restful week-ends.



Perspective Sketch of the Exterior

The Bungalow of the Five Unmarried Brothers

A DESIGN BY CHARLES L. KLAUDER, ARCHITECT

"WE are five," said the unmarried brothers, as they swooped down upon their architect friend, "and we want exactly the kind of a bungalow that will suit all five of us for week-end visits throughout the year." For the brothers five were a united family whose members had not as yet been rudely, or otherwise, separated by the entrance of the eternal feminine.

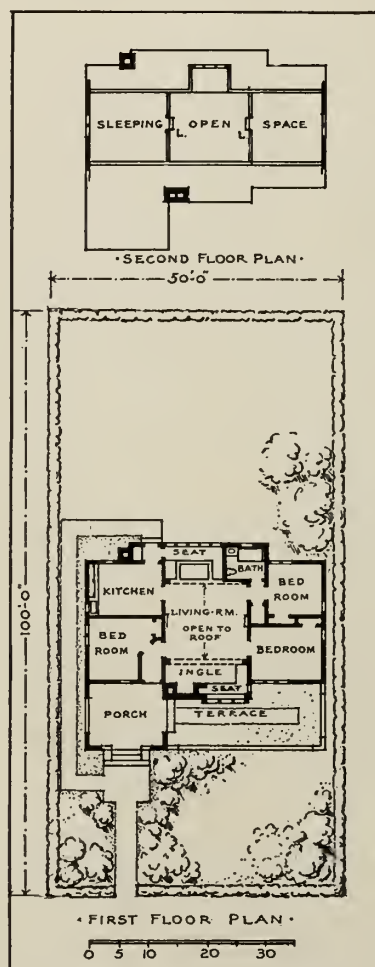
And the architect rejoiced thereat, and being a forethoughtful man, with an eye to future larks to which he, as a friend of the family, might be invited, swore by the seven lamps of architecture that he'd build them a bungalow of so many bachelorhood delights as should keep them in a state of persistent residence for years to come.

Obstacles there were none. Each brother could waive an obstacle or two aside, and collectively they removed all possible and impossible difficulties ere the mind of the willing architect had time to solve them by ordinary scientific methods.

"The lot is narrow," quoth he, "what shall we do for verandas?"

"Away with the verandas," answered brother number three, or it might have been number one, or four, "we shall occupy the house only o'nights and of what use would verandas be?" "With the rooms and the space you want and cry for, wherever shall I put the stairs to go up?" "Away with the stairs," waived another of the five, "like unto the Polynesians, we'll 'flit from floor to floor we know not how.'" And, behold, the stairs departed ere they came, and from the floor of the living-room sprouted ladders, which waxed and grew even unto the second story. "And the stairs to go down?" came the next query. "Put them out of sight, for 'down in the depths of the earth below' we'll keep our Malvoisie and our Sack, likewise our beer and Scotch, and the quieter the stairs are kept the less chance there'll be for undesirable strangers visiting our store in our mid-week absence." It would be difficult for a stranger to find the stairs, but they are snugly tucked away under the seat in the mealing-nook at the back of the living-room.

Woe to the one of the five,



PLAN OF THE BUNGALOW
L, L.—Ladders

whose allotted task it is to bring up the victuals from the cellar, if he forgets anything that is needed during the meal, for then all those seated at one side of the table must rise and file out until the seat has been lifted and the stairs used.

And so they had it back and forth, the architect and the five unmarried brothers, and at last all ideas were thrashed out and the design completed, and the brothers held their breaths and gazed meditatively at the ceiling while the architect computed the cost, each one thanking the fates that there were five in all and their individual

share would be the smaller, however great the total. And, lo! the cost, as computed, was but \$1,800 and the cost, as it actually proved to be, but little more.

Whereat the five brothers rejoiced greatly and were easily worked by the architect in another way than in building the house alone, for he took each one separately aside and without difficulty secured five separate and individual invitations to spend a week-end at the bungalow, so that his visitation lasted from the Fourth of July well into August, and he rejoiced no less than the five brothers.

J. B.

How to Furnish a Bungalow.—II

Floor Coverings

By F. F. K.

SERVICEABLE and appropriate floor coverings for the unpretentious bungalow are of such wide variety and all are so attractive that one would need to have a great many bungalows to have use for as many of them as one would like to buy. The fibre mat is woven of coarse, heavy cords one way closely covered the other by finer, softer grass-like fibres. The result is something like a fine quality of matting, but heavier and more pliable. It is stamped in a conventional pattern in dark blue, brown or green, and in the size six by nine feet costs five and one quarter dollars. It would probably stand washing, or at least wiping, with a cloth and warm water, although the colors might fade a little. Unless subjected to very hard wear one ought to last for two or three seasons. Porch mats woven of India hemp in a beautiful dark red shade come at nine dollars each in a size of seven by ten feet. They could be used indoors if one wished.

If the whole floor is to be covered there are mattings in great variety at from thirty to seventy cents per yard. It is not wise to buy the cheaper grades, for they soon break. The Crex, or grass, carpeting is more desirable than the matting and costs about the same. It is a yard wide and the more expensive grades come in stripes or patterns. The cheaper qualities, however, wear just as well and are very neat and durable. It can be washed or wiped on the floor and when wet gives out a

pleasing odor suggestive of new mown hay. Bedside mats can be made of it and will last for several years.

All in all, perhaps the Dunlo drugget makes as cheap, handsome and serviceable a floor covering as it is possible to find. It is all wool, a yard wide and comes, at forty-five cents a yard, in the widest variety of plain colors. It can be used for bedside strips, made into rugs of any size, or used as a carpet for the entire floor. It wears well, and as it is of a soft weave is easily shaken clean.

Scotch Dhurrie is a heavy hemp and cotton material of the same width and price. It is a thick, closely woven fabric and would wear excellently. It can be had in a dozen colorings and would make attractive couch covers as well as rugs. Some of the pieces are in changeable effects, red and green, brown and green, brown and yellow, that are very pleasing.

Morris filling is a heavy cotton fabric at forty-five cents, a yard wide, mostly in russet, brown or dark red shades. It is rather lighter in weight than either the Dhurrie or the drugget, and unless that were a desirable quality might perhaps be less serviceable than the others. Two or three years ago many of the shops carried a material for floor and couch coverings called cotton filling, which it is now very difficult to find, although persistent search will usually discover it somewhere. It is one of the handsomest and most

serviceable of all the cotton weaves for those purposes, and is also the cheapest. It is a yard wide and the prices vary from twenty-five to forty cents per yard. Its heavy crosswise thread is closely covered by a much finer warp, giving to the fabric a repped appearance. Some of the colors are rather sharp at first, but they fade a little in the light and the blue becomes a delightful gobelin shade and the yellow a very soft and pretty tan.

The ragstyle carpeting, whether used for rugs or an all-over covering, is, of course, an always appropriate material for the bungalow floor. It varies considerably in price, according to the width and also according to the shop in which one buys

it. It can be had in many different widths—twenty-two, twenty-four, twenty-seven and thirty-six inches, and runs from thirty cents to a dollar per yard. The patterns are also varied—stripes, plaids and plain colors. One style, in a plain, soft, grayish yellow, to imitate matting, is very pretty, but would soil so easily as to make it less serviceable than the darker colors. Perhaps the most desirable and artistic looking of them all are those in which the woof is a white cord and the rags are all dyed one color. The blue or the green warp with the white woof are always neat and fresh in appearance, and are neutral tinted enough to make the floor keep its proper perspective.

An Appreciation of Old Mahogany

V. The Invisible Supply

BY ELLEN CADY EATON

IT seems to be the general impression that if one is to collect furniture, that is, buy it from the original owners instead of from the antique shops, the only hope lies in a pilgrimage to the East or South, and that there is very little use in spending time and effort in searching for it elsewhere. It is true that New England has been a fruitful field for old furniture hunters for many years. Its cities were filled with the most beautiful old things, and even in the rural districts surprisingly fine pieces have often been found.

It would seem, indeed, that beautiful furniture must have been at one time most easy of acquisition. It is to be hoped that the people of that time appreciated it as much as it deserved, but as they had none of the hopeless modern

furniture with which to compare it, it is quite probable that they did not. It is indeed certain that their children did not to any extent, for it is this generation whose unpardonable desire to throw away, burn up, or otherwise destroy this old furniture is in some measure responsible for its present scarcity.

I have in mind an old sofa of beautiful design which would have been a great treasure had it not been subjected to the most unreasonable and unreasoning neglect. I have twice been to see it, and shall probably make a third trip, as I find it impossible to convince myself, except at close range, that there is no hope for it. It is now in a barn, but has evidently been left out of doors at some period, for the wood has become soft and the



AN ANTIQUE TABLE
Discovered in the West

veneering falls off at a touch.

Another sofa, even more beautiful, has been in a cellar for so long a time that no one remembers when it was put there, but there it will remain so long as the occupants of the house remain. Money will not buy it; friendship, love, persuasion will not move it.

It must be remembered that, in the East, antique shops flourish to a much greater extent than in any part of the West, it not being uncommon in many cities to find a half dozen shops to the block in the best business sections. And these stores must be fed, and the supply for the most part comes from the surrounding country. Besides the larger cities, many of the small towns now have one or more shops, and even the suburbs are generally well supplied. It is apparent that the taste for old furniture is much more prevalent in the East than farther west, a fact which furnishes food for thought. So it will be seen with so many shops to supply, and collectors constantly at work through the country, that even the seemingly inexhaustible supply of New England must at length give out, and it has in fact already been noticeably reduced.

It is not necessary, however, to torture ourselves at present with this question which ever lurks in the background as to how long it will be before the supply is completely exhausted, for while it is true that good old pieces are getting scarcer, and prices are gradually growing higher, there are yet fields undeveloped and much of interest near at hand. As this part of the country was settled by Eastern people, it is not strange that considerable good old furniture found its way to the West. Many people brought all their household goods, and many others brought their best, and it is this best which chiefly interests the collector.



AN OLD BOOKCASE
Put to an undignified use

All large cities, too, draw their population from all quarters of the globe, and nearly all contain much which is of interest to the lover of antiques.

I might say here, however, that the determined belief that there is nothing to be found is one of the most effectual barriers to finding anything, because at the outset it paralyzes endeavor. If we settle down in the conviction that there is nothing to be had outside the beaten track, we shall not be likely to bestir ourselves to the point of finding anything. I have found this idea that there was nothing to be bought quite as prevalent in New England as elsewhere. I have always been told that there was no furniture to be had for either

love or money; but I have generally been able to prove that there was some waiting to be exchanged for money.

The finest table in my possession was found in the West in the house of a colored woman. It is the card table here reproduced. It is similar in shape to one given in a preceding article, but in many points excels it. The grain of the wood is exceedingly beautiful, and the grooving on the edge of the top and the pattern in the veneering across the front proclaim its fine construction. I think it would be unwise to say how old this table was supposed to be, or for how many generations it had been in this woman's family, as the reader might prove rather skeptical; but as its pedigree interested me far less than the table itself, and as I could make a very fair guess as to its origin, I did not allow myself to be prejudiced by the story which came with it.

It is rather painful that our friends do not all possess tastes akin to ours, but at times it serves a useful purpose, as in the case of this table. A friend first discovered it through the medium of



THE DROP-LEAF TABLE
Found abandoned in a kitchen

her maid and went to look at it with a view to buying it. It did not, however, produce the same effect upon her that it did upon me, for she decided that she did not especially care for it, while for myself, I was certain, the moment I saw it, that it was more essential in our family than even shoes.

The bookcase here given is a good example of the old secretary, and has long been in this part of the country. Where it came from origi-

nally I do not know, but it was doubtless brought west by one of the early settlers. It was purchased second hand some forty years ago by a relative of mine who afterwards prized it for its associations and resisted all efforts of the rising generation to forcibly dispose of it, which explains how it happened to last until my day. It fell to a son who was too tender-hearted to immediately reduce it to kindling wood and who was only too glad to place it in the hands of some one who would preserve it. It was found in a most modern house, and was used in an upstairs room as storage for such old books as were not considered desirable for the other bookcases.

A house in the next block contained a secretary similar to this, which was used as a receptacle for tin dishes in the kitchen. It was rescued from its ignominious position by a lover of antiques, and is now a much prized possession.

The drop-leaf table in the illustration was also found in a kitchen, and was treated with the utmost indifference by the owner, who was very glad to dispose of it for a small consideration. It is a most beautiful table in shape, wood and construction.

Flower Bed Edgings

A PRACTICAL ARTICLE UPON WHAT TO PLANT ALONG A WALK OR A LAWN
AT THE BASE OF HIGHER FLOWERS

BY ERNEST HEMMING

HOWEVER naturalistic we may wish our gardens and grounds to be when we build houses, we cannot get away from artificial lines. We must accept them as a necessity, we must try and make them as appropriate and pleasing as possible. When lawns or walks or drives meet beds of planting these lines are always the most pronounced, and, in order to obscure them, "edgings," the plants that form the edges of larger groups, should be given careful attention.

Edgings, perhaps, should be considered from a utilitarian standpoint rather than an ornamental one. At the same time, nothing is capable of so adding or detracting from the general appearance of the grounds. It does not matter how grand the scheme of planting or lavish the display of flowers, if the edges are uneven and unkempt, the whole effect is not pleasing.

Edgings may be classed in two groups: permanent ones and those of a temporary nature. The former are the most important and include grass verges or borders, box edging, tile, stone, or anything that may be put down as a permanent outline to path border, bed or whatever it may be.

Do not use a permanent edging unless one is really needed. It is not at all uncommon to see it used where it would have been better dispensed with. Where turf forms the outline of bed or border no other outline is wanted except that which forms part of the planting.

PERMANENT EDGINGS.

Permanent edgings of some kind are very essential to the good appearance of the kitchen garden. When the main paths are nicely edged

showing everything clean-cut and tidy, it is converted into a pleasure resort rather than a truck patch. In the old country tile is largely used, many shapes being manufactured expressly for the purpose. Stone and even hard-burnt brick set on edge is often met with and is satisfactory if properly laid.

It is a wonder bricks are not more often used than they are, as they are so easily procured and put down. In preparing the ground see that it is made firm and raked level. Then procure a number of stakes about six inches in length and drive into the ground to give the proper levels. If the stakes are placed about ten feet apart and a straight edge and spirit level is used, it will be possible, by stretching a line taut along the tops of the stakes, to set the brick perfectly level and straight. Lay the brick lengthwise in a trench made for the purpose and firm the ground very carefully on both sides. Always, when digging on the garden side of the edging tile, keep about six inches away with the spade so as not to loosen the soil and get the edging out of level.

In the spring it will generally be necessary to stretch the line along them and straighten the bricks or tiles that are displaced by the frost.

If the garden is skillfully laid out and the walks well made, boxwood is perhaps the most suitable plant to use where a living edge is wanted, in fact, it is the only one. Its longevity, slow growth and ease with which it may be clipped makes it unequalled for the purpose. The principal objections are cost, which amounts to about twenty cents per running foot for the plants alone without counting the cost of setting them in the ground, and



BEDS OF PERENNIAL PHLOX WITHOUT EDGINGS

Showing the need of low plants to fill the gaps and conceal the stalks of the higher ones

its liability to die or become injured during the winter. This last objection would not apply to every locality, as evidenced by many an



PEONIES OUTLINING A TURF PATH



SWEET ALYSSUM AT THE BASE OF GERANIUMS

old garden where box has been growing for fifty years or more.

Good workmanship when planting box edging pays. It is very essential that the ground be



SCARLET SAGE USED AS A BORDER TO FORM A PATH

properly graded and settled before the planting is done. If the ground has not recently been broken up, dig a trench at least eighteen inches deep and work in some well-rotted manure, then fill the trench up again before attempting to plant. Stretch the line about the center of where the trench was and dig another trench as deep as required by the plants. This makes it possible to keep the edging perfectly straight. Set the plants deep and pack the soil firmly about them.

Outside of the kitchen garden there is no better edging for walks than the grass verge or strip of sod. This should not be too narrow. If made wide enough to run the lawn mower over it, and the edges of the turf are kept trimmed, there is nothing much more satisfactory.

SHRUBBERY BORDERS.

Shrubby borders and beds are very like herbaceous perennials in this respect: they are better without any edge at all than a very regular one. It is easy to imagine how unsatisfactory an edge of Japanese barberry would be around a bed of mixed shrubbery. It would practically shut off the shrubby border from the lawn. The low-growing shrubs, such as *Berberis Thunbergi*, *Deutzia gracilis*, *Hypericums*, *Caryopteris Mastacanthus*, *Spiraea Anthony Waterer*, may all be used for bordering shrubby plantings if not set in continuous rows. Usually it is well to have about two feet of space between the turf and the shrubs to allow for a mixed edging of the neat-growing perennials or summer bedding plants.

As a rule, evergreens and deciduous plants do not mix well together. Most

of the former are usually too formal in their habit of growth to need an edging, even when planted in beds.

Rhododendrons are the exception. For edging a bed of these nothing is better than the *Azalea amana* for the purpose. It has the advantage of requiring the same soil exposure and treatment.

TEMPORARY EDGINGS.

Temporary edgings or borderings for flower beds open up quite a large subject; there are so many phases of it.

Under this heading may be classed all kinds of summer bedding whose principal charm is in the blending and contrasting of colors. The most essential one is to have the edgings appropriate. Mixed borders of perennials or plants of unconventional habit of growth should have an edging of a similar habit of growth, such as hardy pinks, *Phlox subulata*, *P. amœna* (creeping phloxes), *Veronica candida*, *Armeria maritima*, *Campanula carpatica* and *Iris pumila*.

Most of these vary in color so that monotony may be avoided. They are all of a more or less compact habit of growth, and by judicious trimming may be kept looking neat, if not very showy, when out of flower.

Insulated beds of geometric outline planted with perennials are usually not a success; the plants are too informal to lend themselves to such an arrangement. They are possible only when one kind of plant is used, such as a bed of phlox, peonies, iris, Japanese anemones or the like. It is a question if it is not better to dispense with edging in such beds, as the plants seem to protest against any attempt at formality. The accompanying photograph shows a bed of phlox in which the only edging possible would be a very irregular one of a lower growing plant, just to fill



ACALYPHA MACAFEANA USED AS A BORDER TO FORM A PATH

in the little bays and hide somewhat the naked stems of the phlox. This lack, so apparent in the illustration, was hardly noticeable when looking from above at the beds in bloom.

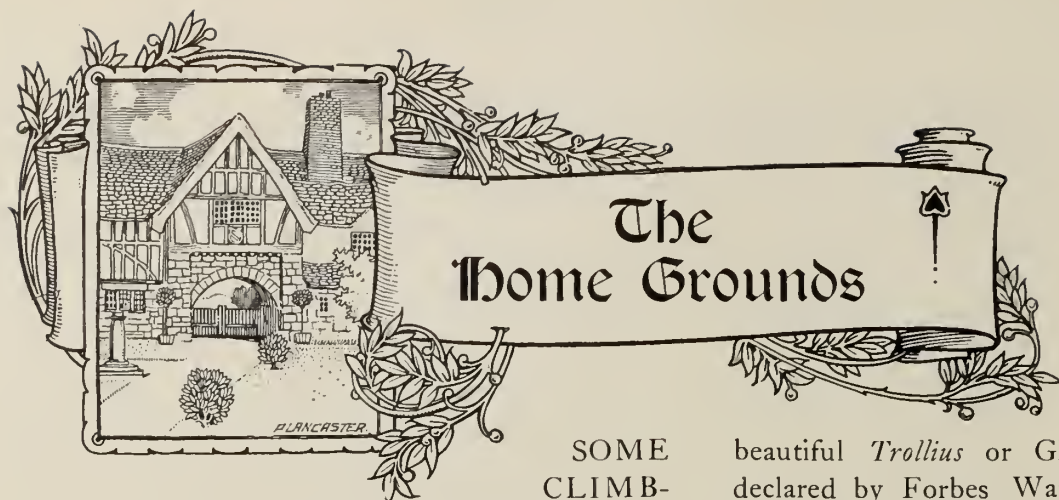
A bed of geraniums looks unfinished without an edge of some kind. And so it is with all formal growing exotic plants that are not a part of our landscape.

Glance at the illustration and note the finished appearance given the bed by a simple edging of sweet alyssum.

Pansies are very nice during the spring and early summer, but are apt to look shabby in the late summer and fall.

Ageratum, *Lobelia*, *Alternanthera*, *Echeveria*, *Pyrethrum* (Golden Feather) are all excellent.

This class of plants, whenever they are of uniform habit of growth, may be used as an edging. The accompanying illustration shows a very effective use of scarlet sage used to edge a turf walk through an arboretum. Many other summer bedding plants may be used in like manner with equally good results. It should be kept in mind, however, that while almost any plant of suitable habit of growth may be used to border a walk, it is very essential that the edging around a bed or border should be in harmony with the plants growing therein.



ING VINES. — The Cypress Vine is a well-known plant of the Morning Glory group, it is sometimes called Indian Pink. Its original home was in tropical America, and it has become quite generally naturalized in the Southern States, where the wild plants blossom from July to October. On account of its rapid growth and attractive color it is useful as a climbing plant in many sorts of situations. The common form has scarlet flowers, but there is also a white-flowered variety.

The Moon-flower is deservedly popular as a climbing plant, giving a luxuriant growth of foliage and large beautiful flowers that open toward evening. It is otherwise similar to the morning-glories and requires much the same treatment. It is especially essential that a notch be filed or cut through one corner of the hard seed-coats before planting, in order that the seeds may germinate successfully.

The plant from tropical America which is called the Cup-and-Saucer Vine (*Cobæa Scandens*) is one of the best climbing vines available to American gardeners. In its native home it is a perennial, but it is so tender that with us it is to be treated as an annual. The compound leaves have commonly four stalked leaflets, with the terminal leaflet transformed into a tendril, by means of which the plant supports itself as it climbs. The bell-shaped flowers often have a diameter of one and one-half inches and are either white or purplish in color. The seed should be planted edge downward and covered slightly. The plant grows rapidly and will reach a height of ten to twenty feet in a season.

The Wild Cucumber is a generally distributed climber and is the best of all for quickly covering unsightly fences and heaps of rubbish. It grows

quickly and develops a profusion of small white flowers.

TROLLIUS OR GLOBE-FLOWER.

— Among the various neglected perennials none deserves attention more than the

beautiful *Trollius* or Globe-flower, which was declared by Forbes Watson, one of the most discriminating judges of floral beauty, to "yield nothing in our May gardens to iris, narcissus or tulip." We find it often in the few old gardens that have been brought through from our grandmother's care, but very seldom do we see it in the new old-fashioned gardens. When once established the plants care for themselves almost, and will yield a glorious display of the golden flowers each succeeding season. They are listed by the better nurserymen and surely deserve a secure place in the hardy border.

PLANTING HARDY LILIES IN SPRING. — Do not be deluded by glowing descriptions of hardy lilies into planting them in the



THE TROLLIUS OR GLOBE-FLOWER

spring. Those descriptions in the spring catalogs are all right; it is scarcely possible to overrate the beauties of this class of plants; but when a florist claims that they will do well if planted in the spring he is stating what is not so. The fall is the only safe time to plant nearly all varieties of lilies. It is possible that some of the varieties might safely be moved from one part of the garden to another; but these bulbs which the florists are now offering have been out of the ground since the previous fall, and there is nothing which deteriorates as rapidly when exposed to air as lily bulbs.

I have made repeated experiments along this line and have buried a great many dollars, along with the lilies, which have failed to come up; or if they have appeared, it has been but to make a little weak growth and then to wither away, while fall-planted lilies, though often not planted until it was necessary to break the frozen soil with an axe, have always done exceptionally well. I think spring planting is responsible for the bad repute of the *auratum* lily as a hardy, reliable bulb. Whenever I have planted these lilies in the fall they have proved very reliable and permanent.

THE GLADIOLUS.—This is one of the very best of the summer flowering bulbs for the home grounds. The bulbs are inexpensive and thrive with the simplest treatment. They can be planted as early in spring as the ground can be tilled, and a succession of plantings may be made up to the first of July. This will give a long period of flowering and will yield very decorative blossoms for indoor use. If the spikes are cut when they are just coming into blossom the flowers will continue to come out for at least a week, yielding a very attractive series of buds and



THE GLADIOLUS

full-blown flowers. There are many varieties now available, and one may obtain combination of colors that are especially attractive.

TRIMMING HYDRANGEAS.—If not already attended to, the hydrangeas may be trimmed this month, but it must not be postponed longer. In doing so cut away about two-thirds of the last season's growth. This makes stocky plants that are able to bear up the great load of bloom with which they cover themselves in September.

The hydrangea makes its bloom on the new wood, so we trim late in the fall, during winter or early in spring; but the better time is spring, as the wood which we cut away is no little protection to the trunk of the shrub during winter, and protecting the trunk of trees and shrubs through that cold season is of much moment.

The hydrangea is a heavy feeder, as is natural to any plant which produces such an abundance of bloom; and if the plants were not well mulched with manure in the fall, it should be done now, using fine, well-rotted manure. If this seems unsightly it may be covered with lawn clippings later on.

The plants should not be allowed to suffer for water after they have begun to set their buds in July or August, but must be watered freely and showered occasionally to preserve the beauty of their foliage.

Cuttings of the new growth taken in June and stuck in the earth beside the plants and kept moist will root and may be transplanted into permanent places the following spring.

Hydrangeas make magnificent hedges or are fine as specimen plants. They will do well in shade or in the open, but I prefer to grow them where they get the full benefit of sun and wind and then to give them generous treatment.

B.



FROM · OUR · OFFICE · WINDOW ·

PLANCASTER



LONG AUTO ROUTES NEEDED.

"I traveled 17,000 miles over European roads and brought my car back in perfect order. I did not have a single accident during the entire trip. Our party passed through nearly two thousand towns, cities and hamlets in seven different countries, and the average cost of operating the car did not exceed two cents per mile per passenger, which was equally as cheap as railroad travel, with the advantage that we were out of doors and saw parts of the country not accessible to those who travel by rail."

Thus a prominent American automobilist, returning from abroad, has expressed himself. It is not difficult to imagine his tempered approbation of roads in this country. If he has anything to observe upon the Federal Government's apathy towards building good roads we doubt if we should care to print it. Invective would probably be directed at our lack of through routes for the automobile. It is said that there are longer stretches of good road in India than there are in the United States. Our maps may continue to be speckled with bits of state-built highways: it is the through route which is demanded by the increase of automobile travel, just as trunk lines were required by the growth of railway travel. Several such auto highways have already been proposed, notably those from New York to Chicago, and from the Schuylkill River to a point near Pittsburg, the latter project being fostered by the Good Roads League. Not by a single society should such roads be endorsed, not by motorists alone are they enjoyed. Perfect long-distance highways should receive the attention of the entire community, because the entire community profits by them. The traveler by horse, by cycle and by foot the good road benefits, and there are a few of these travelers left.

ANOTHER "SOLUTION" OF THE SERVANT PROBLEM.

The Vassar girls have it. The cause of unhappiness of servants, think they, does not lie wholly with the shortcomings of the servants themselves, — their surroundings are at fault.

Those who do the menial chores are com-

monly permitted to approach those they serve only as their labor purchases welcome, and when the labor is done, they are abandoned to lonely and cheerless quarters. This is obviously wrong, from the social standpoint. So a clubhouse is to be built for the girls employed in various capacities in and about the college buildings at Vassar. A social hall, reading and sitting-rooms, an infirmary, baths, gymnasium, laundry, kitchen and locker rooms are to be provided, where the working girl is to be encouraged to mingle socially with her companions, amid wholesome and cheerful surroundings.

Such a clubhouse may benefit college servants, yet it would be impracticable — not to say useless — for household servants in general, it may be objected, and with truth. Household servants are persons whose comforting labor is expected to be felt, themselves neither seen nor heard. And so their workrooms and sleeping quarters are commonly designed to be remote from the *living* parts of the house. In truth, many a servant's bedroom is a refuge after a day's work, that is hardly fit to die in. It is a far cry from its cheerlessness to the attractive clubhouse of the college workers, and that breach it may at present be impossible to span; yet the Vassar enterprise doubtless contains some features that can be applied elsewhere in improving the lot of the servant. In so doing, it will also aid those whom the servant serves.

JAMESTOWN EXPOSITION NOT READY.

"Practice makes perfect" is a rule that does not apply to the merry occupation of holding exhibitions. Increasing frequency of our fairs is no aid, apparently, to opening the gates on time to a completed show. Jamestown is far from ready on the opening date, and a correspondent of a New York daily proclaims to the awaiting world, "Wait." Things move slowly in old Virginia, but none the less surely, and it is probable that those who visit what promises to be an autumn exposition will be repaid.

INDOORS AND OUT

THE
HOMEBUILDERS
MAGAZINE

JUNE 1907



ROGERS AND WISE CO.-PUBLISHERS
NEW YORK BOSTON CHICAGO

The advertisement features a decorative border made of interlocking tiles, with small red and black tile accents at the corners and midpoints. In the center is a large, intricate tile pattern consisting of a central red star-like shape surrounded by concentric rings of black and white tiles, with red accents.

ORIGINAL MANUFACTURERS OF
INTERLOCKING RUBBER TILING

NEW YORK BELTING & PACKING CO. LTD.
91 & 93 CHAMBERS STREET, NEW YORK.

Indoors and Out

A MONTHLY MAGAZINE DEVOTED TO THE BEAUTIFYING OF AMERICA
CHIEFLY BY MEANS OF ARCHITECTURE AND THE ARTS ALLIED TO IT

ROGERS AND WISE COMPANY
PUBLISHERS 85 WATER STREET BOSTON

NEW YORK
4007 Metropolitan Building
1 Madison Avenue

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Entered at the Boston, Mass., Post Office as Second-Class
Mail Matter, October 14, 1905.

CHICAGO
302 Ellsworth Building
355 Dearborn Street

SUBSCRIPTION PRICE \$3.00 A YEAR IN ADVANCE. FOREIGN SUBSCRIPTIONS \$4.00
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Contents for June

VOL. IV

1907

No. 3

A VINE-WREATHED ENTRANCE PORCH	Frontispiece
THE HOME OF THE MOTOR CAR By Horace Wells Sellers	101
	(Illustrated)
VERANDA HOUSES By William Alanson Borden	110
	(Illustrated)
HOW TO CONSTRUCT A TENNIS COURT By P. S. Hildreth	115
	(Illustrated)
THE MISSION STYLE IN MODERN ARCHITECTURE.	
II. Is there a Mission Style? By George Wharton James	119
	(Illustrated)
A GENTLEMAN'S HUNTING BUNGALOW	124
	(Illustrated)
HOME RECREATIONS FOR CHILDREN INDOORS AND OUT By M. H. Northend	125
	(Illustrated)
HOW TO FURNISH A BUNGALOW.	
III. Selecting the Tableware By Florence Finch Kelly	128
	(Illustrated)
THE INDOORS AND OUT SERIES OF MODERATE-COST DWELLINGS.	
A Concrete Villa on a Hillside By Mann & MacNeille	132
	(Illustrated)
THE BEST VINES FOR DECORATIVE USE By Ernest Hemming	135
	(Illustrated)
AN APPRECIATION OF OLD MAHOGANY.	
VI. How to Tell Old Furniture By Ellen Cady Eaton	140
	(Illustrated)
A "DARMSTADT" HOUSE IN AMERICA	142
	(Illustrated)
HOME FIRE PROTECTION By Franklin H. Wentworth	144
	(Illustrated)
A LATTICED ENTRANCE PORCH	146
	(Illustrated)
THE HOME GROUNDS	147
FROM OUR OFFICE WINDOW	148





A VINE-WREATHED ENTRANCE PORCH

Ampelopsis, Clematis and Dutchman's Pipe clothing Walls of Brick. The Gables are constructed in the True Half-Timber Fashion, *i. e.*, with Brick Nogging laid between Structural Timbers

Estate of Hugh Hill, Esq., Irvington-on-Hudson.

Algernon S. Bell, Architect

Indoors and Out

A MONTHLY MAGAZINE DEVOTED TO THE BEAUTIFYING OF AMERICA
CHIEFLY BY MEANS OF ARCHITECTURE AND THE ARTS ALLIED TO IT

VOL. IV

JUNE, 1907

NO. 3

The Home of the Motor Car

HOW THE GARAGE SHOULD BE PLANNED WITH A VIEW TO ATTRACTIVENESS AND PRACTICAL USE

BY HORACE WELLS SELLERS

THE growing popularity of the automobile, especially as an adjunct to the suburban residence, has resulted in greater consideration being given than formerly to its housing. At the outset of the motor's popularity little attention was given to this subject; and perhaps the cost of an automobile in many instances may still incline the owner to resort to extreme economy when confronted with the necessity of providing a building to shelter it. On consideration, however, the highly finished and more or less luxuriously appointed modern car calls for the same care and attention as is ordinarily given to a pleasure carriage, and suitable housing is an economy in the long run. The building may be planned to simply afford sufficient floor space for the car, if considered as a shelter only, or it may be more liberally proportioned to provide room for making minor repairs and for the proper

cleaning and attention to the car while under cover, with closets, work bench and other incidental conveniences. There should be, in any event, sufficient light and ventilation for the preservation of painted surfaces and upholstery, without, if possible, exposing them to direct sunlight; and in winter sufficient heat should be provided to avoid excessive dampness and injury to the leather work by frost.

IN PLANNING A MOTOR HOUSE*

it may appear advantageous, in the matter of first cost, to proportion it to the exact dimensions of the car or cars it is to accommodate, and sometimes the room is thus contracted more than the consequent saving in cost of construction could possibly warrant. A reasonably liberal allowance

* There is good reason to prefer the English term "motor house" to the borrowed French "garage."



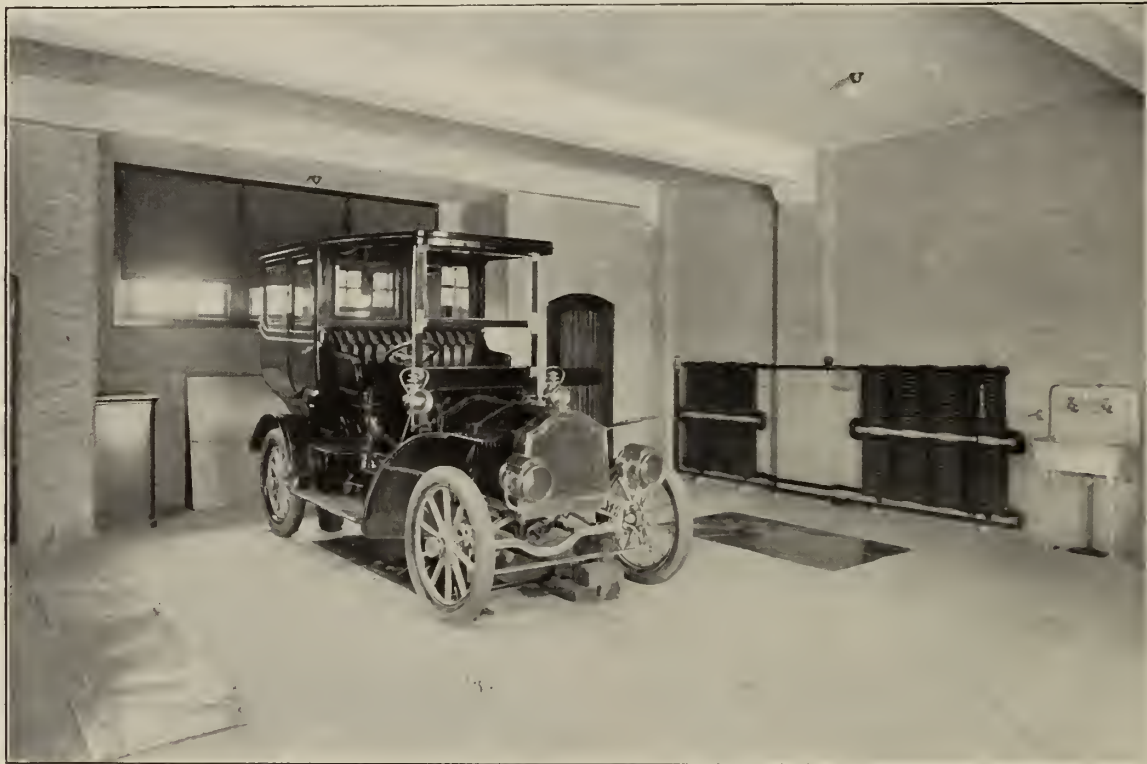
MODERATE COST GARAGES IN STONE, BRICK AND HALF-TIMBER



A FIREPROOF GARAGE AT DEVON, PENNSYLVANIA

The property of Charles M. Lea, Esq.

Designed by Horace Wells Sellers



THE INTERIOR OF MR. LEA'S GARAGE

Showing vitrified brick wall facings, polished copper drip-pans countersunk in cement floor. The car is standing over the inspection pit, the doors of which are closed, their top surface being covered with copper to form a drip-pan



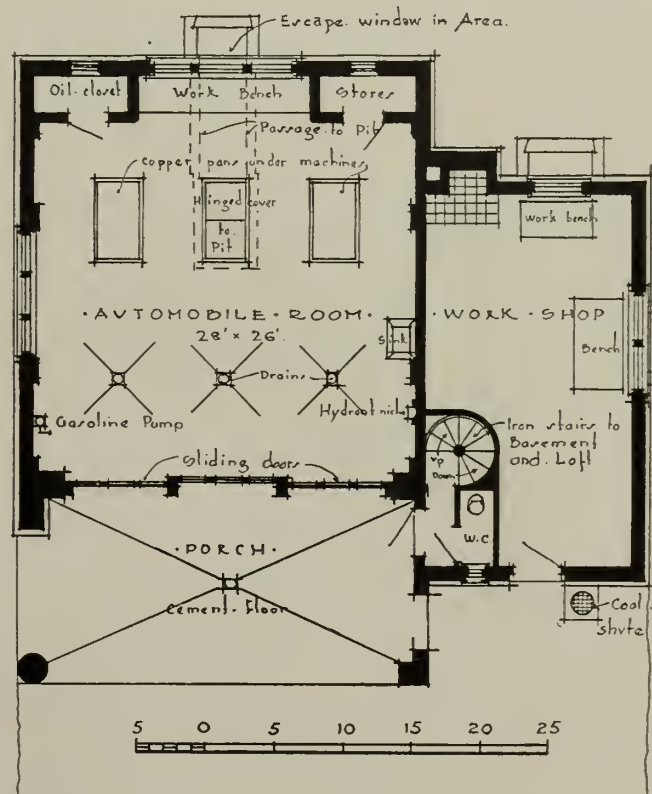
THE GARAGE SHOWN ON OPPOSITE PAGE IN ITS PICTURESQUE GROUPING WITH STABLE AND COACHMAN'S DWELLING

of floor space is rarely regretted, especially if the owner replaces his car by one of larger dimensions after the house is built; and this contingency should certainly be borne in mind in planning a house as a permanent improvement if the owner's present car is a "runabout" or other smaller type. Furthermore, if the building is too contracted, there is no opportunity to provide many of the conveniences that are conducive to orderliness and due care in the maintenance of the car and its belongings, and which quite surely prove ultimately to be an economy.

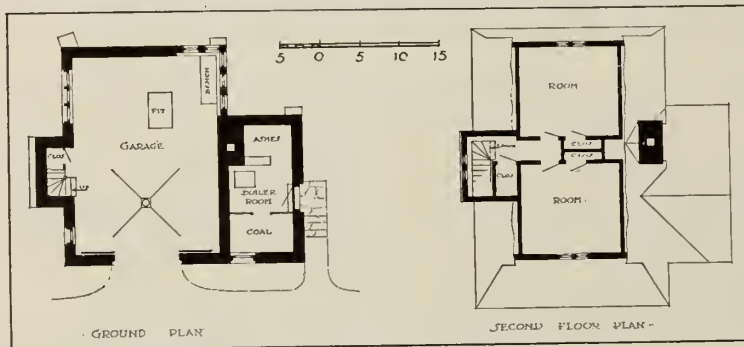
Where a garage is placed near the stable or other outbuildings the opportunity for interesting and picturesque grouping should be taken advantage of, and ordinarily it can be made an attractive feature without necessarily increasing the cost to any material extent if a fairly substantial structure is desired.

If the garage is part of the stable group, or if placed close to other buildings of a more or less inflammable nature, it would seem wise to utilize fireproof, or at least, fire-resisting materials in its construction. It is good practice, in any case, to minimize the use of woodwork wherever possible in the interior finish. And if the walls are of stone, concrete or brick, the interior can be plastered with cement, faced with enameled or vitrified brick or tile, bearing in mind that the interior wall surfaces for a height of at least five feet above the floor should be made to resist hard usage and to be as non-absorbent as possible. If cement plaster is used it should be well painted in oil colors with a varnish or gloss finish; but

where the walls are of brick, the brick facings become part of the construction and the most suitable finish is thus obtained with but little additional cost. In this case, the window sills, door and window jambs can be of molded brick so as to round all corners, and at the floor level a cove brick can be made to meet the floor in a curve, leaving no sharp angles to collect grease and dirt. Recesses should be formed in the walls for the hydrant and gasoline pump so that they will not project beyond the wall surface, and it has been



PLAN OF THE GARAGE SHOWN ON OPPOSITE PAGE



PLAN OF THE GARAGE SHOWN BELOW

A GARAGE WITH OUTSIDE PORCH FOR THE CAR
Property of Dr. Edward A. Schuman, Pelham, Philadelphia

suggested that vent holes should be introduced at the floor level to afford an escape for gasoline fumes, although this would seem to be an unnecessary precaution in most instances. If the ceiling or roof is of wooden construction, it can be made fire-resisting to a great measure by the use of hard plaster on metal lath, plaster board or suitable fireproof material. If metal lath is used it should be furred off from its bearings, and for greater security as to fire resistance, the framing may be covered with asbestos paper before the lathing is applied.

For the floor, cement concrete is most generally used, although it is open to the objection that it absorbs oil to its detriment, and as the oil is also injurious to rubber tires, vitrified brick or tiles are preferable. It is quite usual to bed in the cement floor shallow copper drip pans or counter-sunk slate or marble slabs under the car to receive the

GARAGE WITH CHAUFFEUR'S QUARTERS AND HEATING PLANT
Property of H. S. Kerbaugh, Esq., Rosemont, Pa. McIlwain & Roberts, Architects

oil drippings; but this does not wholly meet the difficulty, and cement floors frequently become unsightly by oily waste being carelessly dropped about. There is now a compound offered which, it is claimed, renders cement non-absorbent, and, if such is the case, it will overcome the objection to cement for garage flooring. Whatever floor material is used it is obvious that care should be taken to keep the surface free from grease, one authority suggesting that it should be rubbed freely with a cloth moistened with acetone. To provide for washing the cars within the building, and also for general drainage, the floor surface should be graded to drain to one or more catch-basins with iron gratings or perforated covers, and it would be a good plan to have these made so as to be less liable to stoppage by the accumulation of grease and floor sweepings than the usual cesspool and bell trap.

It seems to be an open question

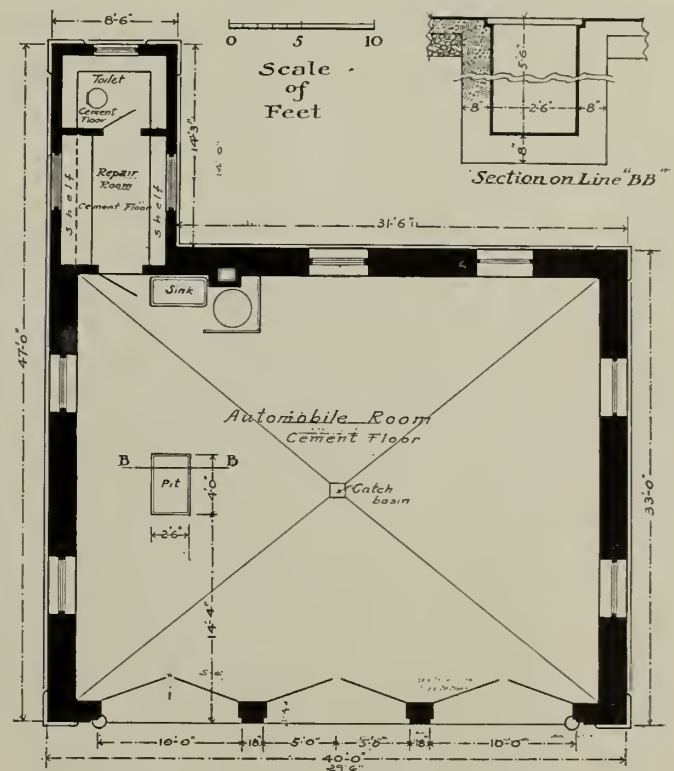
WHETHER AN INSPECTION PIT IS ESSENTIAL

to motor houses, since cars are now constructed with driving gear accessible from above. If a pit is introduced, however, it should be of proper area and depth for convenient access to the underside of the car, with the walls faced with non-absorbent material, as suggested for the wall surfaces above. The bottom should be graded to a drain, and in some cases it has been lined with galvanized iron to receive the oil drippings. One or both ends of the pit, according to its location in the house, should be carried to an area window, not only for ventilation, but to afford a retreat if by accident (as has happened) the car should take fire while the operator is at work beneath it. If electric light is available there should be provided a plug and cord connection for a portable lamp protected by a wire guard. In regard to



THE CEMENT GARAGE OF HERBERT M. SEARS, ESQ.
At Pride's Crossing, Mass.

Peters & Rice, Architects



PLAN OF GARAGE SHOWN ABOVE

The walls are double-studded, twenty inches thick, and on the outside are covered with roughcast plaster. Inside the granolithic of the floor is carried up over the walls to the roof, the timbers of which are of hard pine, finished "natural" and left exposed.

THE ARTIFICIAL LIGHTING

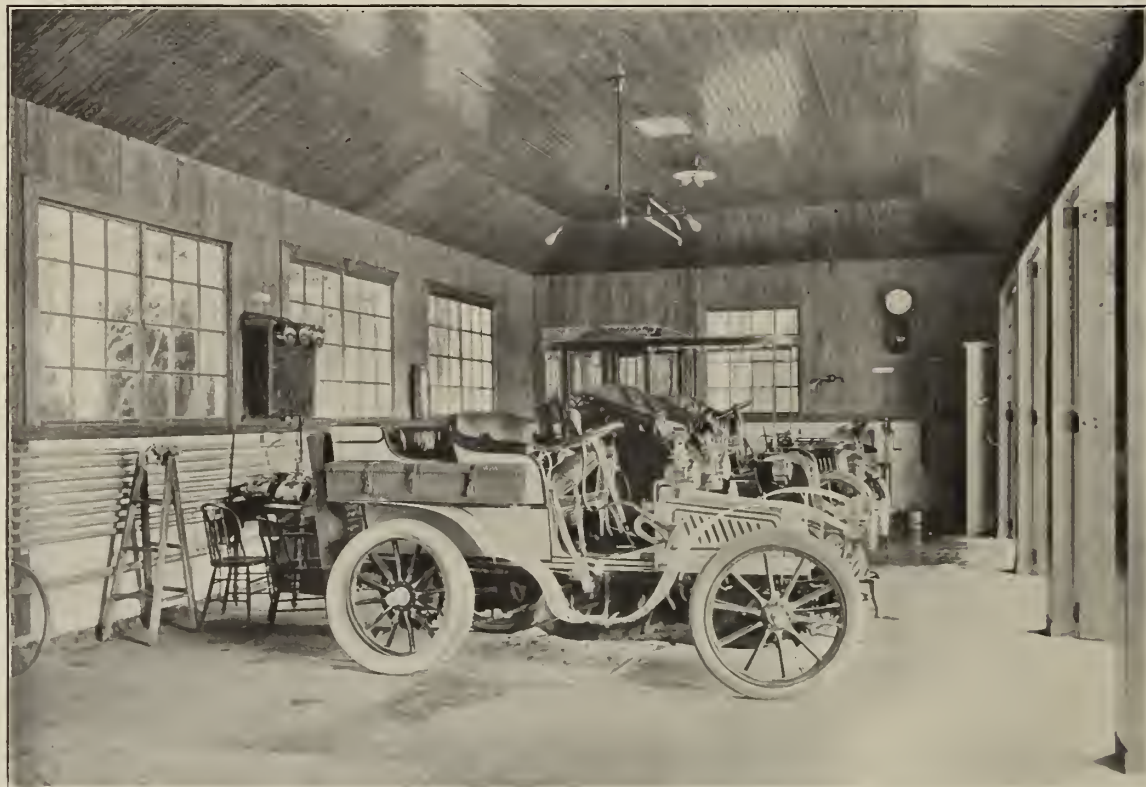
of a motor house, it is obvious that the presence of gasoline precludes the use of oil lamps or gas jets, for although the gasoline vapor may not rise to the level of the lamp or gas fixtures, such illumination at least introduces the danger from the



A FOUR-CAR GARAGE WITH EXTERIOR OF ROUGHCAST

Property of Walter D. Denegre, Esq., West Manchester, Mass.

Andrews, Jacques & Rantoul, Architects



INTERIOR OF THE GARAGE SHOWN ABOVE

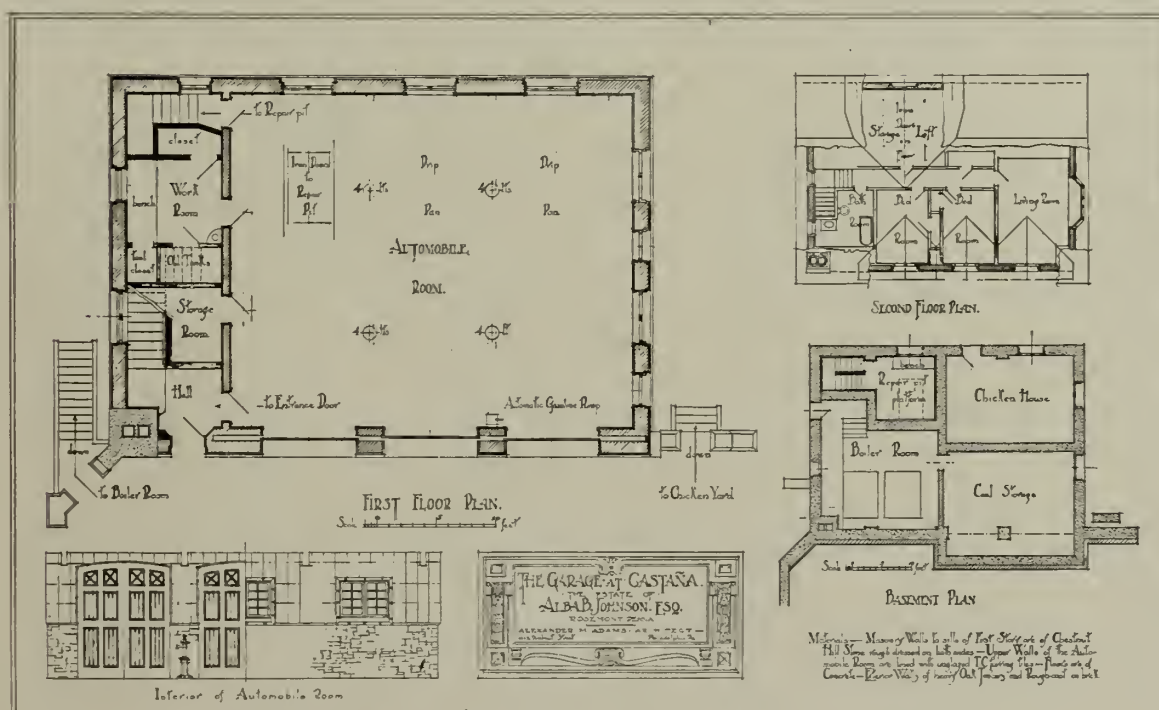
Although wood-finished above the window sills it is entirely fireproof below that level. Junction of wall and floor made by a cove preventing collection of dirt. Auto charging switchboard on wall



A PICTURESQUE HALF-TIMBERED GARAGE

Property of Alba B. Johnson, Esq., Rosemont, Pa.

Alex. M. Adams, Architect

PLANS SHOWING ACCOMMODATIONS FOR THE CHAUFFEUR ON THE SECOND FLOOR
AND PROVISIONS FOR HEATING, REPAIRING, ETC., IN THE BASEMENT

LIBRARY
OF THE
CITY OF PHILADELPHIA



A GARAGE ON AN ESTATE AT CHAPINVILLE, CONNECTICUT

In the basement of the structure is an electric power plant operated by water
Property of Robert Scoville, Esq. Stone, Carpenter & Willson, Architects



A STATELY STONE GARAGE IN THE ENGLISH STYLE

The second floor contains a billiard room and also chauffeur's quarters
Property of R. M. Hogue, Esq., Germantown, Philadelphia Chas. W. Bolton, Architect



use of matches, for a lighted match dropped to the floor or near the car may cause ignition if gasoline vapor is present. Where electricity is not available it has been suggested that gas or oil burners might be placed in wall recesses ventilated and accessible from the outside of the building and separated from the interior by glass panels through which the room would be illuminated without danger of the gasoline vapor reaching the lamp or gas jet. The nature of the gasoline vapor affects also



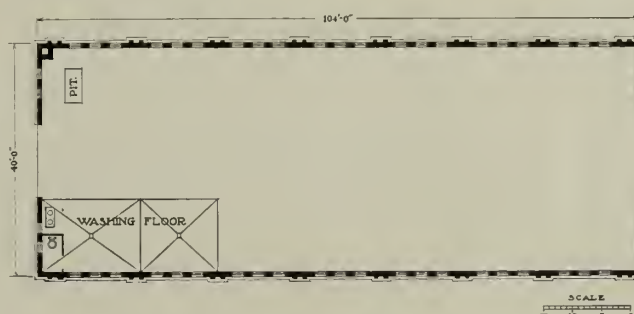
AN "APARTMENT GARAGE" IN A SUBURB OF BALTIMORE
Built of Concrete Blocks and Wholly Fireproof. Each Resident of the Neighborhood has an Allotted Space for his Car

THE HEATING PROBLEM

and not only should stoves be excluded from the motor room, but where steam or hot water is employed the boiler or generator should be so placed that there is absolutely no direct communication between it and the main floor of the house, and if placed in the basement, access must be by an outside area.

Where a basement is provided for the heating apparatus the floor of the motor house above should be of reinforced concrete or other fireproof construction. Under ordinary conditions concrete slabs, supported on steel beams if the span requires it, have been found economical, for it needs but a top dressing of cement to form the finished floor surface, and the extra cost compared with a five-inch thick cement concrete pavement is practically that of wood centers, reinforcing metal and such beams as may be required. Access to the basement must be by outside steps, and care must be taken to make tight cement joints around the pipes passing through the floor so that there may be no chance of gasoline vapor reaching the basement.

The heating system may be hot water or steam as preferred, direct radiation only being employed. As in the case of stable heating, hot water has the advantage of furnishing the warm



PLAN OF THE APARTMENT GARAGE
A Single Repair Pit serves for all the Cars

water supply for washing purposes, although a hot water generator can be provided if steam is used.

If the conditions are not favorable to a basement, the heating plant may be placed in a room or enclosure on the level of the main floor, in which case the wall radiators or coils must be set above the boiler level to insure proper circulation or return to the boiler.

As in the case of a coach house, high temperature is not desirable in heating a garage, forty-five to sixty degrees being sufficient to obtain the proper atmospheric conditions.

THE FITTINGS OF A MOTOR HOUSE

are largely an individual matter. It is generally found convenient to have an oil closet for lubricants and the storage of cotton waste and oily utensils, the enclosure being provided with non-absorbent walls and floor, and a window for ven-

tilation. As rubber deteriorates if kept in a dry place, the closet for the storage of tires and other supplies should be ventilated also by a small window. These two closets can be placed at opposite corners of the room, so as to form a recess between them for a work-bench, and so arranged that the window over the bench will be sufficiently removed from the possible location of the car to prevent direct sunlight from reaching the varnished surfaces and cushions. There should be storage space also for coats, rugs and other motor essentials.

A wash basin or sink may be provided in addition to the hydrant, and an overhead hose connection is sometimes introduced, arranged the same as in a coachhouse for washing vehicles. As already stated, the gasoline pump can be placed in a niche and piped to the storage tank situated at a distance from the building as required by the Board of Fire Underwriters. Other fittings of the house frequently include a hand lift and overhead runway by which the top or limousine may be removed from the car body and

shifted to an out-of-the-way position. For more convenient handling of the car, turntables have been designed, but under ordinary conditions their use would seem unnecessary, as there is generally room for the manipulation of the car outside of the building.

Thus far the points touched upon are those common to motor houses in general, whether for one or more cars; but as the size of the house is increased, the larger space available permits other conveniences, and repair shop facilities, sleeping apartments for the chauffeur or other employees, and even a billiard or smoking-room for the owner's use may occupy part of the building.

The accompanying illustrations show various motor houses recently constructed, and will serve to indicate the growing interest in this subject. As automobilism has apparently passed its ephemeral stage, there is greater inducement to give thought to its maintenance and to make the motor house a permanent improvement and one best adapted to the general purpose for which it is designed.

Veranda Houses

A SUGGESTED NEW TYPE OF HOUSE, RESEMBLING THE BUNGALOW, BUT MORE AMPLY PROVIDED WITH SPACE THAT IS OUTDOORS YET UNDER ROOF

BY WILLIAM ALANSON BORDEN

FOR the country, of course. In the city we have no room for verandas, nor for much else that pertains to comfort. Only two things appeal to us, —luxury and stern necessity. We build our houses on one end, and climb from room to room. We do other things equally foolish and equally necessary, because we are forced to do them. But when the time comes that sees us undriven, when we gather our flock about us and seek that other bourne from which no sojourner ever willingly returns, let us leave our city house behind us in the city, where it belongs, if it can be said to belong anywhere, and take with us into the country, not a pile of brick, with tall fire-wells cut into various parts of it, but a plain, comfortable, suitable, one-story house, —a home. In the country we have plenty of room for verandas and for most other comforts; we have altogether too much room for a staircase. If one must climb, let him climb a tree.

Presumably we make our summer pilgrimage in search of fresh air and an invigorating outdoor life. So far as the men are concerned, we usually get what we go for; but how about our wives and sisters? How large a part of their summers do they spend beyond the eaves? And would it not be as well to build our summer home so that a good part of the time they now spend under a roof, and must continue to spend under a roof, could also be passed in the open air? In other words, for the same reason that we make our living-room the largest and the pleasantest room of our winter residence, should we not make the veranda the largest and most frequented room of our summer home? The larger part of a woman's life, her home life, could then be spent out of doors at least, if still beneath the roof-tree.

The accompanying plans and sketches illustrate three different types of one-story *veranda*

houses, — *homes without stairs*; as unpretentious as the people who would be likely to build them, but, like those same people, not unnoticeable.

The design Figure 1 is that of a low, rambling, shingled house of the old New England type. It looks to be two hundred years old, but will be found to be quite up to date when one examines the floor plan. It is comfortable, roomy and homelike. An artist would expect to see such a house in just such a place; consequently we may also add — it is suitable. It fits the landscape. Our grandfather's good taste is there, without his discomforts.

The main veranda is very large and somewhat protected, and it continues clear around the house in a six-foot promenade. The living-room is also large, well lighted and cool, and its doors and windows are so placed that when they are thrown open the room is practically a part of the veranda. There are four large chambers with connecting baths, roomy closets and fireplaces. All the windows of the house are of the French pattern, giving easy access to the verandas, and these windows are so placed as to give cross-draughts in all the rooms. All the ceilings run well up into the roof, leaving, of course, sufficient air spaces to cut off any radiation.

The design in Figure 2 is quite different from the last. It is more of a hot-weather house. The veranda, beside

reaching out beyond the walls, both front and back, runs right through the center of the house. No breeze can blow, be it ever so gentle, without sucking through this veranda, and affording a cool retreat on the hottest day. The floor plan of the house shows it to be divided by this veranda into two distinct parts. On one side are the day rooms, — the living-room, for wet weather or cold; the dining-room, for occasional use in all weathers; and the kitchen, for as few visits as possible. On the other side are the four chambers, each provided with a closet large enough to swing a cat in — carefully. The servants' quarters are in another building, as are also the storerooms.

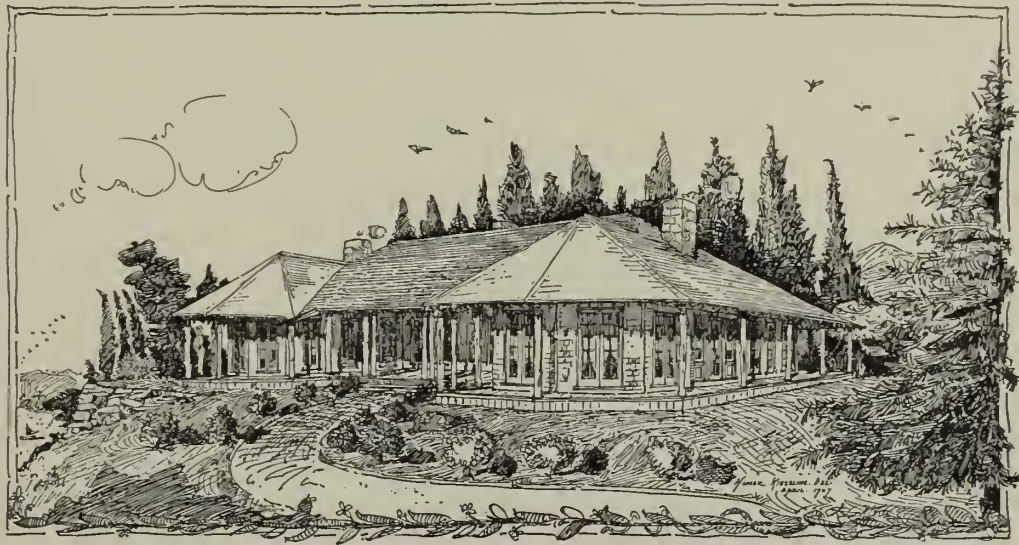
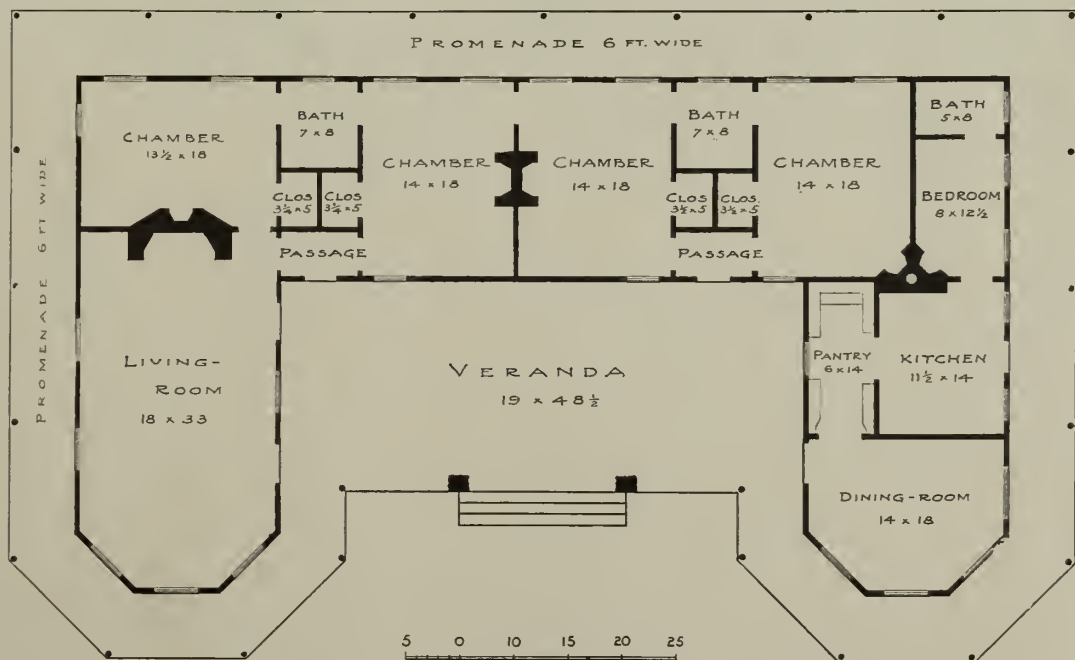


FIGURE 1



A LOW, RAMBLING "VERANDA HOUSE"
Built of Rustic Timbers and Shingled

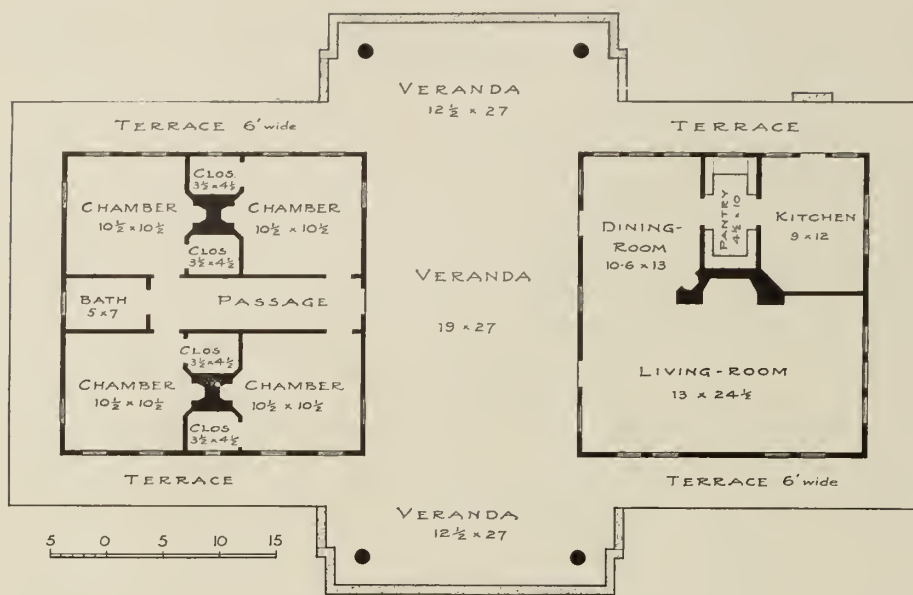
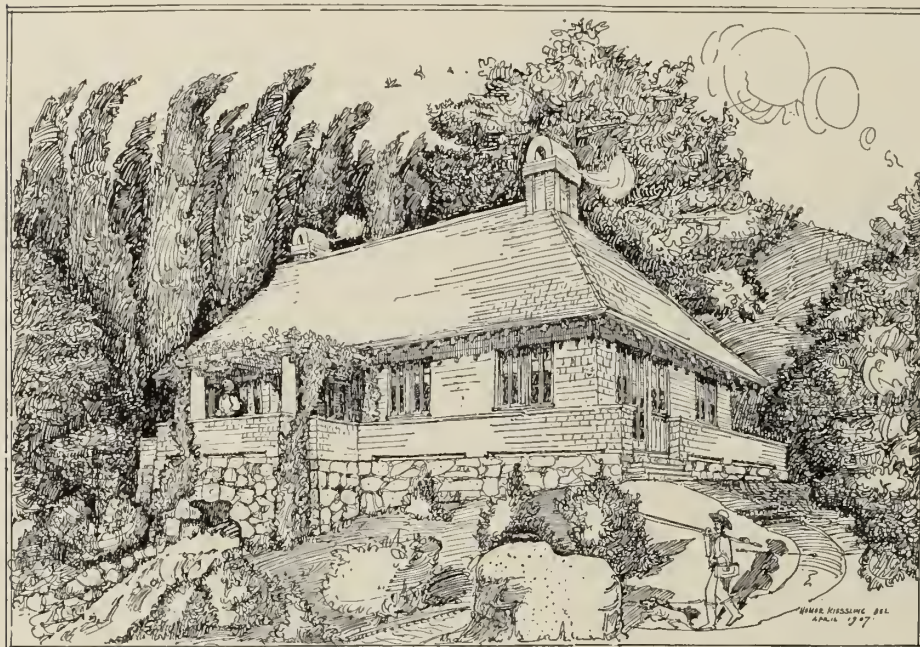


FIGURE 2



A HOT-WEATHER HOUSE

With Terraces surrounding it and a Broad Veranda running through the center

As both sides of this house are alike and equally presentable, the approach can be from any direction. There is no "Mary Ann back" to be shunned. The question of site is therefore rid of that complication, and can be decided with regard to the best outlook, or from the direction of the prevailing breeze.

The outside finish may be of shingles or of concrete, as one prefers. The end walls of the veranda and the veranda pillars might well be of field stone. The veranda floor should be of concrete. The terrace surrounding the house, made a covered promenade by the projecting eaves,

should be paved with concrete also.

The last design, Figure 3, lends itself best to the Moorish style, or the Mission, that daughter of the Moorish, particularly as the walls and partitions are of concrete. The floors and roof might be of the same material, except for the expense. Concrete has a large resistance to a crushing force, and can be used economically in any place where it is not subjected to transverse strains. Its tenacity is poor, and when used for roofs or rafters it has to be reinforced with steel, thus making it more expensive than wood. Wood is therefore used for the floors and roof, the latter being covered with half-round tile.

The principal feature of the interior is, of course, the veranda. It is more a part of the interior design than in either of the other plans. It runs back into the house far enough to form the general passageway from room to room, and is intended to be used as the main living-room of the house and the reception-room as well. To the left is a smaller living-room for wet

weather, and to the right is the dining-room. In the main part of the house are also four large chambers, with connecting baths and closets, with fireplaces, and with windows arranged for cross-draughts. The workrooms are in the L, which is farther extended to contain the laundry, store-rooms and servants' quarters. These last are only indicated on the floor plan.

The outside coloring should be soft, and not too pronounced, and there should be sufficient contrasts between the colors of the roof, of the walls and of the panels around the windows.

In all of these houses the ceilings are carried

well up into the roofs. The air spaces over the ceilings will prevent the rooms from being hot. There are no attics; there are no cellars either: at least there are none represented on the plans. The endeavor has been to get a house absolutely without stairs. Cellars can be excavated under any of them, if desired; but the houses are for summer use only, and during the summer store-houses built outside are just as convenient as cellars, and they are certainly much cheaper.

In closing, let me once more call attention to the two points these houses are meant to cover. The design has been to afford the women of the family plenty of fresh air in the pursuit of their ordinary household vocations, or avocations, and at the same time to eliminate that constant trotting up and down stairs which eventually sends so many of them to the specialists.

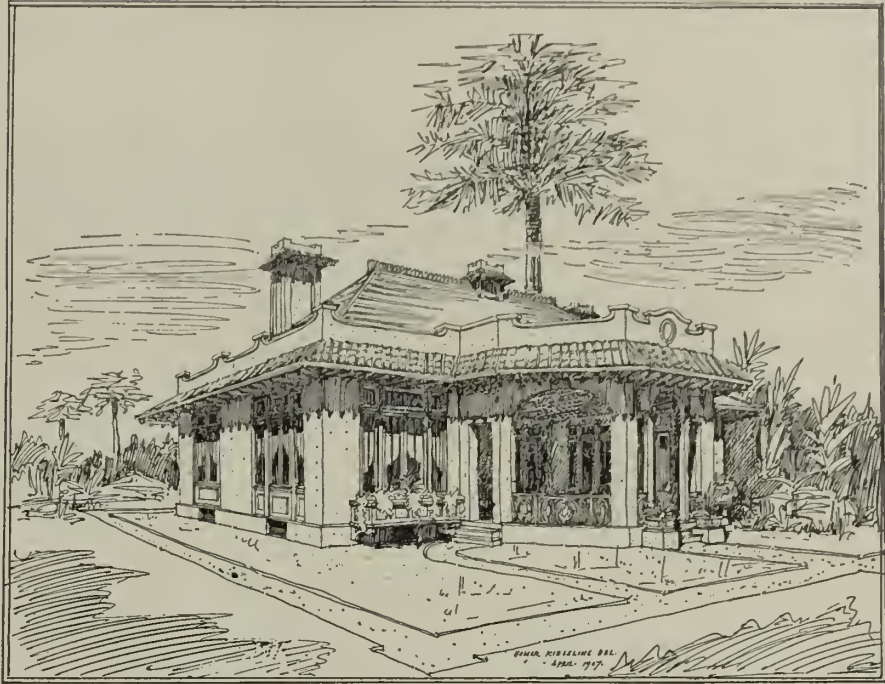
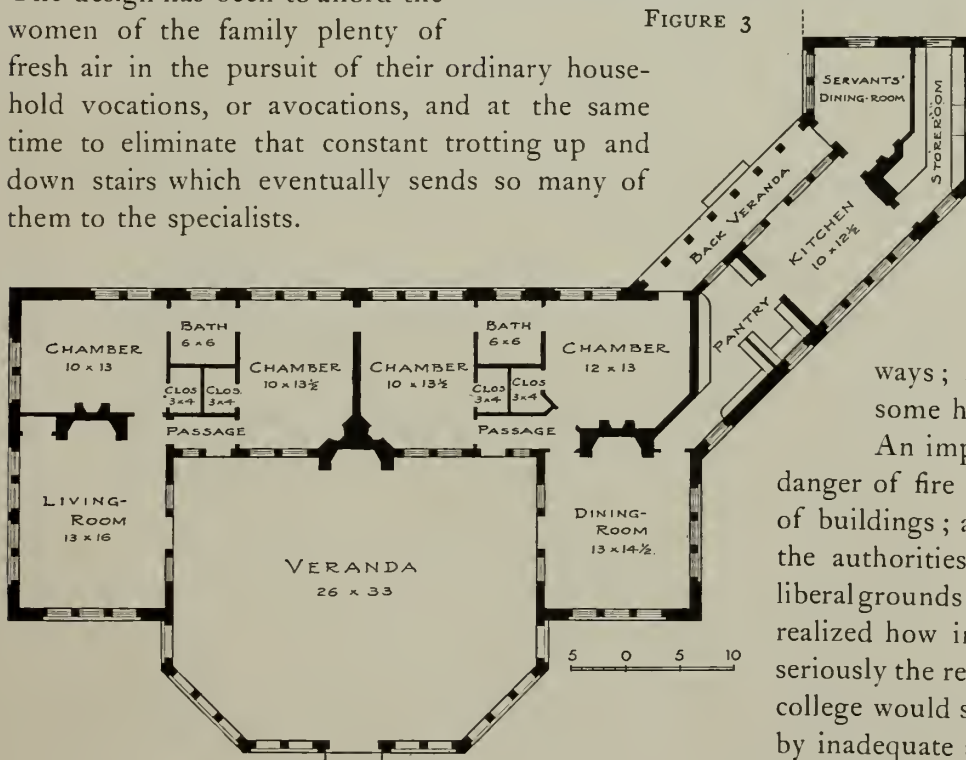


FIGURE 3



A VERANDA HOUSE IN THE MOORISH STYLE
In which the Veranda, as a large Living Space, becomes an integral part of the Interior Plan

FIRE MENACE IN COLLEGE DORMITORIES.—Commenting on a recent inquiry by the National Board of Fire Underwriters into the precautions, or lack of precautions, taken against fire in college dormitories, the *Chicago Evening Post* says: "The results are discreditable to the American people and to the authorities of American colleges." Of six hundred and seventy-

four dormitory buildings inspected one hundred and forty-two were of frame construction. Many, though built of stone or brick, were not fireproof and were found without the ordinary safeguards. Over two hundred had wood stair-

ways; some had but one stairway; some had no fire escape of any sort.

An impression exists that there is no danger of fire where there is no congestion of buildings; and this impression possesses the authorities of those colleges that have liberal grounds and open spaces. It is scarcely realized how imminent disaster lies and how seriously the reputation and popularity of the college would suffer from a loss of life caused by inadequate safeguards.

SAN FRANCISCO'S RECOVERY.—

Within one year after the earthquake, San Francisco has more than regained her former trade, and her population is fast mounting to its former figures. The sum of \$75,000,000 has been expended in the work of reconstruction, and more than \$30,000,000 has been paid for labor alone. Permits for the erections of fireproof buildings costing \$50,000,000 have been granted, and fifty thousand housesmiths are now at work. There is little doubt that such a record has never been paralleled.



TENNIS COURTS OF GRAVEL AT THE TUXEDO CLUB

C. T. H. G. H. A. H.

How to Construct a Tennis Court

By P. S. HILDRETH

A DEALER in sporting goods will testify to the steadily increasing interest in lawn tennis and the fact that the game has long since demonstrated that it is no passing fad. When golf first became generally popular in this country many tennis players took up the game, and it appeared as if tennis might be played only by a few experts. While golf has held its own in popular favor, it has taught its wholesome lesson of the value of out-of-door exercise and interested many of its converts in other games. Nine golf clubs of every ten have added tennis courts as a necessary adjunct and have materially helped in the great revival of interest in tennis of the last two years, which in spite of some foresight and the best efforts of manufacturers, has practically exhausted the market of balls, gut for stringing bats, and other supplies.

In view of the general interest in tennis, not only by young people but by a large class of players who learned to play twenty-five years ago and still love the game, a good tennis court is an attractive feature of any country place. It is the object of this article to describe the essential details of construction and to help the reader who may construct, to avoid mistakes which cannot afterward be readily corrected.

A tennis court is generally constructed with a surface of turf or gravel, clay, or other similar material. Where the owner has wished to avoid the cost of constant care concrete has been used, as at St. Augustine; asphalt, as in San Francisco; or wooden boards, as in the Adirondacks. Common to all courts are the matters of dimensions, light, dryness and shelter from wind.

While a court upon which "doubles" may be played is 78 feet long and 36 feet wide, the ground area required is 120 feet by 60 feet; this is necessary to give ample "run-back" and space to play, not only for the skill of the game but to avoid accident. Small ditches or sharp slopes should be

not less than 12 feet away at the sides and 20 feet at the rear, unless chances are to be taken for a bad fall or a sprained ankle. The court for playing singles is 21 feet wide; and as the service court is the same for both, it is customary to lay out a double court to include a single court. The dimensions are shown in Figure 1. The dotted line represents the net and the heavier lines those of the single court. At each end of the court and not less than 20 feet behind the base line should be set backstop nets about 12 feet high of wire mesh; it is economy to use two-inch mesh with extra heavy wire, heavily galvanized. Where two courts are side by side the distance between side lines should be about 15 feet.

Glaring sunlight or flickering shadows interfere seriously with a player's ability to accurately strike the ball. The court should therefore run north and south rather than east and west and there should be no trees which throw flickering shadows across the court. It is also well to avoid a background of trees at either end through which considerable light might pass. The length of the court and consequently the general direction of play should be north and south, in order to avoid the shining of the sun in the morning or evening directly towards one side.

Shelter from wind is desirable, but not of serious importance, and is partially offset by the additional heat in summer when a light breeze may make playing more agreeable.

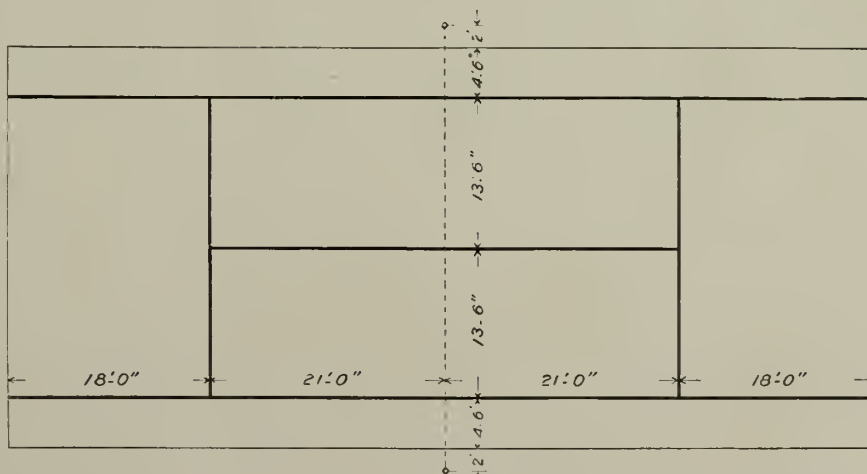


FIG. 1. SHOWING THE PROPER DIMENSIONS FOR A DOUBLE TENNIS COURT, INCLUDING A SINGLE COURT

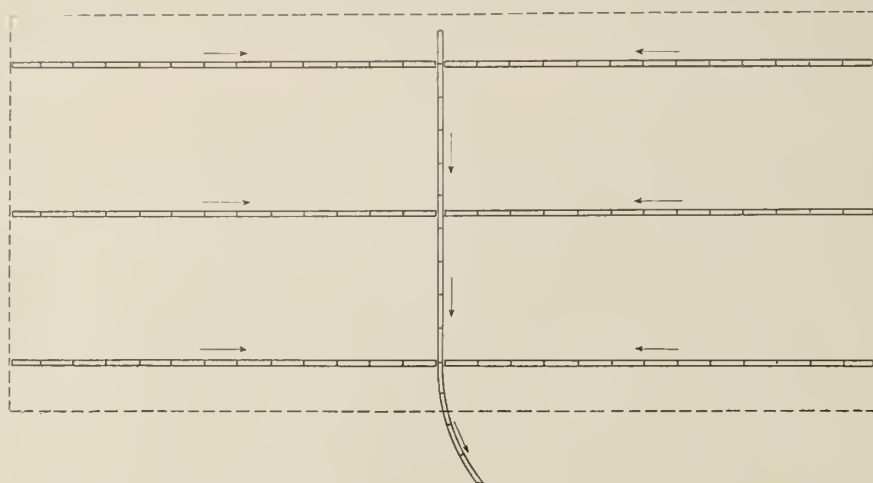


FIG. 2. SHOWING METHOD OF LAYING DRAINS UNDER A COURT
MADE ON LOW GROUND

Most important is the matter of dryness as secured by proper drainage. If the court is to be located on a knoll or ground naturally well drained, it is only necessary to provide for quickly carrying off the water from the surface of the court. This is best accomplished by giving the surface a slope of about one inch from the base line to the net and laying a three-inch porous, tile pipe (without joints) under the net about one foot below the surface and sloped one inch in twenty toward the natural drainage and carried far enough to take the water away. If the location is on low ground three lines of tile pipe, one in the center and one on each side, beneath the side lines of the single court, should be laid running from the base line to the pipe line beneath the net, as shown in Figure 2. If the court is on a hillside a ditch one foot wide and two feet deep should be dug around and at least twenty feet away from the court on the upper side and filled one foot deep with small stone and then up to the natural surface with earth. This will take care of surface water coming from above.

A GOOD TURF COURT

is attractive in appearance and the most satisfactory for playing; furthermore, the most important tournaments are played on turf. The original construction is no more expensive than other kinds, but the securing and maintaining of good turf is a matter for a skillful gardener. In constructing, it is necessary to remove the existing turf; if of satisfactory character, carefully cut it in sods twelve to eighteen inches square and six

inches deep and save it. The subsoil should be loosened to a depth of twelve inches, and all stones, roots and foreign matters removed. If this excavation goes into poor soil the surface loam should be laid at one side, the poor soil removed and the subsoil carefully leveled and loam replaced and other loam brought in. A clayey loam is to be avoided, and a moderate admixture of sand is desirable. There should be a depth of at least ten inches of good soil, and every possible precaution taken to see that it is free from weeds. The surface

should be raked and carefully levelled, then rolled, wet and rolled and wet for several days. Level should be carefully maintained by filling in more loam where needed. When thoroughly compacted, selected sods should be closely laid, and well wet, and from the next day a constant process of wetting and rolling should be carried on for several days. Subsequently the court can only be kept in good condition by frequent wetting and rolling, cutting the grass close and keeping it free from weeds.

If good sod is not available and the ground is to be sown, it should be done in the early spring or fall. Have at least twelve inches of good soil well raked, dry and level, but not rolled hard. Sow liberally and roll well, then rake any surface seed lightly into the soil, then roll again thoroughly and allow to settle from weather and the seed to get well started. Do not use for play until the next season.

TO CONSTRUCT A DIRT COURT

excavate to a depth of twelve inches and level and roll the surface thoroughly, then place drain pipes as required just below the surface and covered by about two inches of earth. Roll again, then lay gravel or broken stone of a size which will pass through a two and one-half inch ring to a depth of six inches, rake level and roll. Then lay finer gravel or stone which will pass through a one-inch ring to a depth of three inches; level and roll. Then lay the final surface consisting of a mixture of finer gravel or broken stone screenings or a mixture of sand and clay. (See Figure 3.) Fine

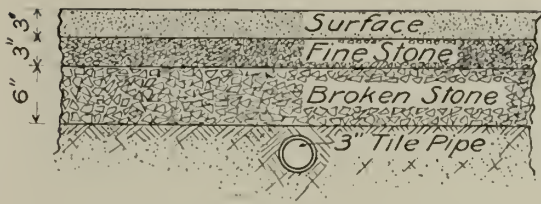


FIG. 3. SHOWING IN CROSS-SECTION THE VARIOUS LAYERS OF A DIRT COURT

white gravel from the size of a pea to sharp sand the size

of a pin head gives a very fast surface and one which, when well compacted, does not soften after rains, but drains almost immediately; it further has a quality of apparently absorbing light, whereby it may be used for play fifteen minutes to half an hour later in the day than a clay surface. It has the slight disadvantage of requiring most frequent rolling and wetting. A surface of screenings sets well and does not require so much rolling, but it wears out the balls quicker and is less comfortable for the feet. A clay surface should be made of a mixture of clay and sand and the proportion will vary from equal parts to three parts of clay to one of sand. It is not necessary to use clean sand, but a mixture of loam and sand will do to mix with less clay, or frequently a natural soil can be found which

will make a good surface. It is better to have too much clay at the start, as sand can readily be added and will gradually work its way into the clay under constant wetting and rolling. The clay and sand surface does not require quite so much attention as gravel, but every surface should be wet and rolled at least every day if played on much. The surface of courts should always be swept before rolling, in order to level small lumps or depressions or worm casts.

Other natural materials frequently give excellent satisfaction, such as a rotten shale which packs and holds perfectly, yet is porous and elastic. The principles of constructing a good dirt tennis court are the same as those of good road construction, and any intelligent local engineer can be of assistance in suggesting local materials and should be employed to give levels for the construction of any kind of a court. The cost of getting levels accurately is well spent. In an hour a surveyor can accurately set six or eight stakes giving proper levels, whereas an amateur may spend as many days and not get satisfactory results.



THE TURF COURTS AT THE ARDSLEY CLUB



THE STATEN ISLAND CLUB'S COURTS OF TURF
And the Ladies' Clubhouse

CEMENT AND ASPHALT COURTS

must necessarily be constructed by a skilled contractor, and if in a climate where there is frost, require a deep foundation and careful drainage. They are hot, uncomfortable to the feet and generally little used in this climate.

The posts for the net, except for turf courts, should be permanently set in the ground, preferably in a concrete base three feet below the surface. For turf courts the net posts are moved to keep their relative position with the lines which are moved to prevent the turf being worn to bare spots, particularly at the place where players stand to serve.

FACTORY EMPLOYEES CARED FOR. — The social betterment of its employees is a problem liberally solved by the large cordage manufacturing company, whose plant lies not many hundred yards from the historic Plymouth Rock. Health of the workers is a first consideration, and model tenement houses have been built. These, with a small allotment of land are rented at \$1.50 to \$2.25 a week. The organization formed

Of the several kinds of courts that with the clay surface is easiest kept in order, but it drains slowly, gets muddy easily and in dry weather is dusty. The lines are difficult to maintain with whitewash and are usually marked with white tape held by wire staples driven into the ground; the tape loosens and trips the players, and with the staples, often gives irregular bounds to the ball. The extra work on a surface with more sand, or a gravel surface, produces more satisfactory conditions. The well-built, well-kept turf court is a joy to the heart of every tennis enthusiast, and where conditions and funds permit is the most satisfactory.

in the interest of the employees includes a social center, a reading-room, a library, schools and a band. Prizes are offered for the best garden products, which are exhibited by the workmen on Labor Day. A paper is published by the employees' colony in English, German, Italian and Portuguese. In refuting a charge of paternalism, it is declared that the workers are free to accept or to reject the arrangements made for their benefit.

The Mission Style in Modern Architecture

BY GEORGE WHARTON JAMES

II. Is there a Mission Style?

THERE are those who tell us that there is no Mission Style—it is a mere adaptation from the Moorish and Flemish, with the arch from the Romans, etc. Of these objectors, I beg to be allowed to ask, “Where is to be found any style that is not an adaptation of something existent prior to its commencement?” The Greek column was evolved from the Egyptian. The arch is only the curved lintel, and so on, through the whole gamut of architectural detail.

It is the sheerest nonsense to say that a style must be composed of details that are new and original, or it is not style. It is by the re-arrangement of details in the introduction of elements in a new way, that style is made. As well say there is no German style as differentiated from the Italian, in music, as to say there is no Mission style in architecture.

In the peculiar massing together of certain details style is evolved. It is a “spirit” clear, positive, definite, the presence of which is always felt in a pure example, and the absence of which, in part or in the whole, that constitutes an imperfect manifestation of that style. Yet the “style” can be analyzed and its component parts definitely and fully known.

The details that go to make up the “Mission Style” in architecture are:—

- I. Solid and massive walls, piers and buttresses.
- II. Arched corridors.
- III. The curved, pedimented gable.
- IV. The terraced towers, surmounted by a lantern.
- V. The pierced campanile, either in tower or wall.



THE CAMPANILE OF PALA CHAPEL

VI. The broad, unbroken, mural masses.

VII. The wide, overhanging eaves.

VIII. The long, sloping roofs covered with red clay tiles.

IX. The patio or inner court.

It is possible, from a careful study of the mission buildings themselves, to discover the sources of these features. It is imperative that, at the outset, we recognize the power of memory. The padres had vivid and distinct impressions of certain buildings in their mind when they began their work here. Possibly they had some engravings of such

buildings, possibly not. We can readily conceive their going to work as all persons should who desire to erect a structure for any purpose—that is, they thoroughly considered the necessities for which the buildings must provide. Size they need not consider, as far as land was concerned, for they were, indeed, “monarchs of all they surveyed.” Taking into consideration the Indians they were to control, and the various requirements of the church, the quarters needed for themselves, the Indians of all conditions and both sexes, the various industries they proposed to carry on, the possibility of armed invasion from hostile Indians—all these things must be provided for in their plans.

Needs, therefore, imperative needs, were the primary consideration. The thought of beauty or adornment did not, as yet, enter into their calculations. They were possessed of the simple wisdom that sees clearer than most of us see in this complex age. In our buildings, too often, we consider show, ornamentation, making an impression first, forgetful of the primal fact of all

beauty that, *where utility is required*, utility is the first essential of beauty.

The priestly architects saw that they had to provide for the following: Church, with its sanctuary or altar space, baptistry, sacristy, mortuary chapel, choir loft; quarters for the priests; refectory; quarters for the major-domo of the domestics; quarters for the Indians, so arranged that the adult sexes of the unmarried could be kept apart and securely guarded and watched; workshops for the various industries.

These manifold requirements seemed naturally to adapt themselves to a series of buildings that should be arranged around a large, inner court, square or *patio*, where, on occasion, work could be done or the Indians assembled without being in sight or subject in any way to influences from without the walls. The *patio*, therefore, was a natural outgrowth of the necessities of the case.

The experience of centuries had taught the padres that they were in a country liable to earthquakes. *Temblores* were not infrequent. The walls, therefore, must be well founded and solid in their structure. Here we have the need for the massiveness manifested in walls, piers and buttresses.

These buildings were to be erected in a country of fierce and hot sunshine where shade was essential for comfort. This demanded the wide eaves and the corridor. The use of the arches was a simple, architectural device which gave relief to the bare, massiveness of the

solid walls. In some cases, as at La Purisima, there were no arches to the corridors.

But these arched corridors were required for much more than mere shelter. Among the most important and imposing of the ceremonials of the Catholic Church are processions. Clad in gorgeous vestments, the priests marched forth led by acolytes carrying the Holy Cross or swinging the censer, or by a priest holding up a sacred reliquary, or banners and pictures designed to awaken the better emotions, accompanied by a choir of many voices singing the sacred songs of the church or chanting holy rituals. It was imperative, therefore, that the setting of these processions be as impressive as it was possible to make them. Here, then, was the motive for the departure from the rigid straight lines elsewhere used. The arches required but little more labor to construct, and they added a feature of simple and impress-

ive adornment to this sacred and important function. And it is to be observed that wherever the padres were most successful in their labors with the Indians, the extent of these arched corridors is the greatest, as, for instance, at San Juan Capistrano, San Luis Rey, San Fernando and San Antonio de Padua.

The curved, pedimented gable and the lantern surmounted terraced towers were both architectural memories brought by the padres from Spain. The tower is a simple and striking architectural device for uplifting the bells of a church, which in a time



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THE MORTUARY CHAPEL AT SAN LUIS REY

when people were more scattered than now had a more important function to perform. Then, too, the requirements of the church as to regular hours of prayer necessitated the elevation of bells so that their warning signals calling the faithful could be heard on every hand. The bells, too, had to be protected somewhat from the weather. Where limitations were felt by the priestly builders so that towers could not be erected, the campanile as at Pala was designed, itself a most effective, simple, picturesque and pleasing feature, or the pierced wall as at San Juan Capistrano, San Antonio de Padua or Santa Ines. Here and elsewhere it will be noticed that the piercings are irregular in size, and the cause for these variations is evident in the varying sizes of the bells. Yet the effect, as a whole, is harmonious and pleasing.

Belonging to this class of necessitous and fortuitous births — at least as far as the California missions are concerned — is the use of the red clay tile for roof covering. The earlier missions were covered with a thatch of tules or willows and earth. But hostile Indians found it, in their attacks, an easy matter to destroy the hated missions by setting fire to the thatch. To prevent this, the tile was made. It is now an essential feature of the mission style.

As for the broad and unbroken mural masses, two things may have conspired to produce this feature. Where adobe bricks were used in Spain and Mexico, it was the habit to plaster them over and then give a coating of whitewash to the whole. While, as I shall show in an article on construction, the mission builders allowed themselves the widest possible latitude in the use of material, their architectural memories recalled to them the plain, unbroken mural surfaces. This in itself was sufficient to demand the introduction of the plaster covered surfaces in California. But it is also possible that a consideration of beauty interjected itself. The plain wall, its effect heightened by the red brick tiles, is the most perfect combination that can be found for a country landscape. The greens of the trees and plants, the long stretches of rolling hills, of the grasses or other verdure, of the clear turquoise of a California sky, seem especially beautiful when seen in contrast with the mission buildings. Then, too, it should not be overlooked that a coating



BELL-TOWER OF THE MISSION SAN GABRIEL

of plaster was an added protection to walls made of such yielding material as adobe.

As for the long, sloping roofs. In a country where snow does not fall and where rain is not a constant factor steep roofs are not required. The sloping roofs answered every purpose, and here, as elsewhere, utility proves to be the highest beauty, for a moment's reflection will show that the long, sloping roofs are far more in harmony with the general style of architecture than a high pitched roof would be.

Having thus briefly seen the style, we are prepared to look for a *type building* in the mission style. Such a type must necessarily contain, in harmonious combination, all the elements of which the style is composed.

Where is such to be found? This is a matter of great moment to the student and architect. Let us look at the missions in the order of their sequence, beginning at San Diego and traveling north. Is San Diego a type? From a rereading of the essential elements we find that, at least in its present condition, it lacks details II, IV and V, so that it cannot possibly be a type structure.



END VIEW OF THE MISSION SAN GABRIEL

At San Luis Rey, however, every element is in existence. The keen, analytical vision of the far-seeing Peyri, whether he was an architectural student or not, consciously or unconsciously led him to demand a satisfactory and complete structure which could be gained only by a harmonious assembling of all the elements. The result is that San Luis Rey is indeed San Luis, King-the-King of all the mission buildings of California,



ARCHED CLOISTERS AT SAN JUAN CAPISTRANO

the one complete, perfect type, the one to which all students will go for instruction and inspiration, the chief source of the best work in this style.

In its days of pristine splendor, San Juan Capistrano was doubtless a typical structure, but the tower fell in the great earthquake of 1812, and consequently, as we have no picture of it in those early days, we are unable to tell how perfect and harmonious it was as a complete and typical building.

Pala's Campanile has always been a type unto itself, unique, singular, beautiful, interesting. It was a simple and unaffected method followed by Peyri to elevate the bells so that their ringing call could be heard echoing throughout the interior valley.

San Gabriel Arcangel lacks many elements to make it the typical structure. So also of San Fernando. Los Angeles Chapel need scarcely be considered architectural at all.

San Buenaventura lacks the pedimented gable, the red tiled roof, the arched corridor, three of the most essential features, so that, although it possesses all the six other features, its lack of these three essentials prevents its being a type structure.

Santa Barbara is a singular composite structure. It is distinctively Mission in its terraced towers pierced for the bells and surmounted by

lanterns and crosses, its red tiled roofs, its arched corridors, its massive walls, piers and buttresses, its overhanging eaves and its patio, and yet the introduction of the Ionic columns and capitals in the *fachada* deprive it of its purely Mission character. The addition is a loss to its purity. It is a detriment rather than a benefit. In their desire to improve its appearance by the introduction of an extraneous, foreign and unnecessary element, its

priestly architects weakened its character. It is unfortunate, therefore, that this building has so often been reproduced as a typical Mission structure.

Santa Ines lacks the towers, and La Purisima has neither towers, pediments, gable, arched corridors, patio or campanile.

In its restored condition San Luis Obispo has lost almost all exterior features of Mission distinctiveness it once possessed save the massiveness of the unbroken mural surfaces.

Santa Margarita, though but a chapel, has some charming features, elsewhere fully described, but it never had any pretense to being a typical structure. San Miguel, however, was a most elaborate establishment, though architecturally it lacks towers, campanile and pedimented gable, three essentials of type structure.

San Antonio de Padua, though very different from San Luis Rey, may also be regarded as a type, save for one exception, though now in so sad and dilapidated a condition. The exception is the lack of terraced towers, every other feature being present.

La Soledad is in ruins, but as far as we know, it never had any architectural distinctiveness, and therefore passes out of the field of consideration.

San Juan Bautista lacks the pedimented gable, the terraced tower, and the campanile, and while the Presidio church at Monterey possesses a tower, it is a modern renovation and not in true Mission style, being pyramidal instead of terraced in the rounded form.

Padre Sierra's own church of San Carlos Borromeo in the Carmelo Valley one might suppose would be a pure type, but, though a beautiful structure, it is a demonstration that the *padre presidente* was more occupied with the work of establishing the mission and reaching the souls of his Indians than in bothering himself about details of



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SANTA INES MISSION

Mission architecture. It was originally wide eaved and had a tiled roof, but this latter was lost in the "renovation" or "restoration" of Father Cassanova in 1884. It is my hope some day to be able to restore the roof to its original position and angle, and recover it with tiles, and I am slowly accumulating funds for that purpose.

Santa Clara and Mission San Jose, with the lost buildings of Santa Cruz and San Rafael,



TILED ROOFS AT SAN JUAN CAPISTRANO

leave us nothing for study and comparison, and San Francisco Solano at Sonoma is so modern a church that only the old tiled adjacent buildings give us any material for consideration.

San Francisco de Asis (Dolores) still remains in the City of Destiny, and here is another variant from the Mission type in the *fachada*, only the tiled roof and massive, unbroken wall surfaces identifying it as akin to the rest of the series.

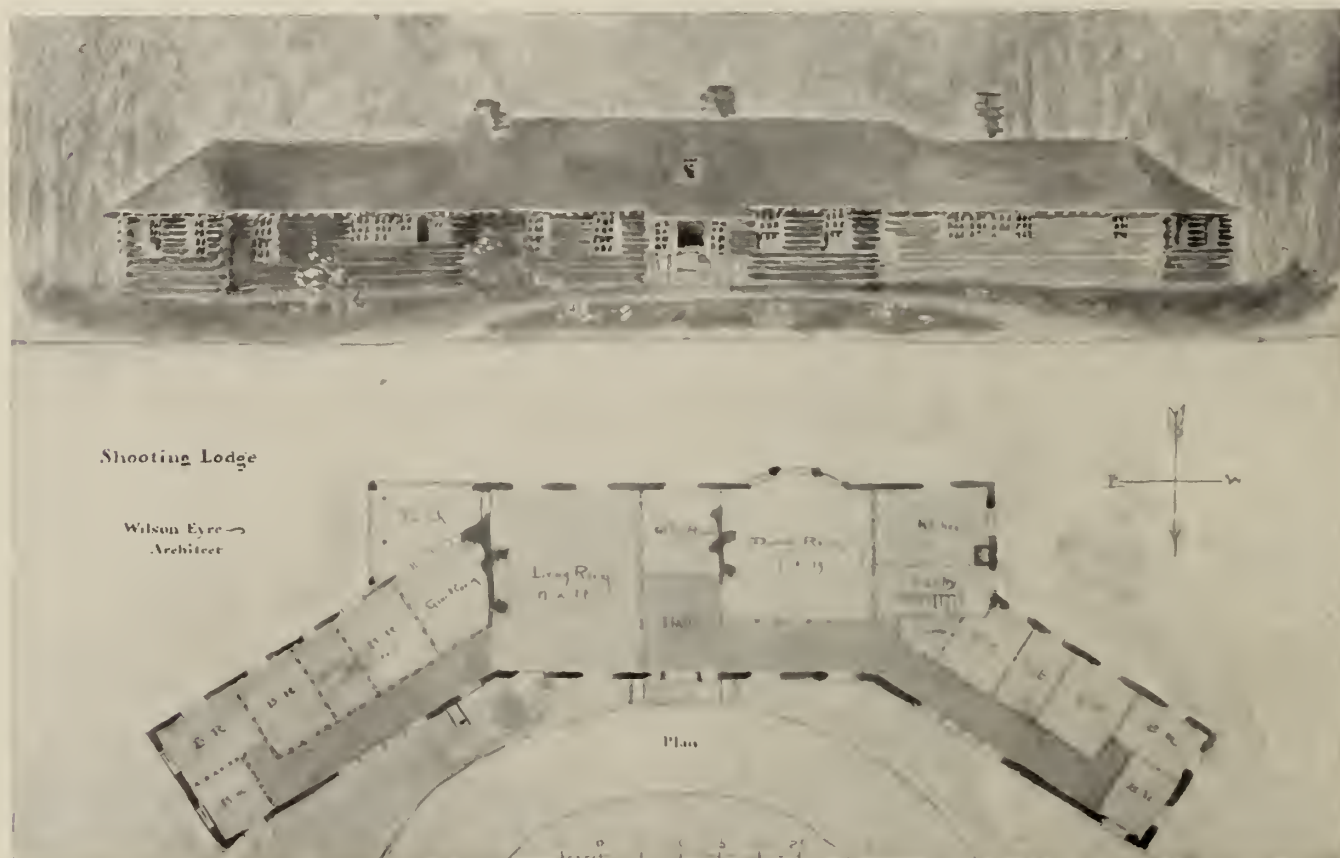
(To be continued)

In this brief and cursory analysis I have given to the architect and student a basis to work upon. He himself can pass the buildings in rapid review before his mind and thus aid himself to a clearer conception of what a typical Mission building really is, and then if he deviates from purity of type, he will do it with knowledge and determination instead of through ignorance and accident.

A Gentleman's Hunting Bungalow

A LARGE game preserve is a most liberal site for building, and the structure placed upon it that is lavish of space is the most likely to express hospitality. Such a structure is illustrated below. The design has been carried out on an estate on the Delaware Peninsula, where uninhabited stretches of wooded country meet equally solitary shores. Broad halls, a living-room 19 x 23 feet with writing alcove, a dining-room 19 x 19, kitchen and pantry, a gunroom,

four bedrooms and bath in each wing comprise the single floor accommodation, in which there is no sense of space having been economized or comfort sacrificed. Outdoor light and air are admitted by openings in the interior walls, notably in the partitions between living-room, writing-room, dining-room and the hall. The bungalow is built of logs and roofed with shingles. A small stair leads from the pantry to servants' quarters above.



A HUNTING BUNGALOW ON THE DELAWARE PENINSULA



Home Recreations for Children, Indoors and Out

FACILITIES FOR ENTERTAINMENT AFFORDED THE YOUNG FOLK ON A NEW ENGLAND ESTATE

BY M. H. NORTHEND

NOWADAYS there is a tendency toward system in the summer recreation provided for children. Formerly the child was turned loose during vacation to seek his or her own form of amusement, which was often without the saving grace of "fun," and frequently led to disappointment and tears. But the youngster of to-day demands more than the one of yesterday. His needs are studied more carefully, and it has been found that there is a psychology of play as well as of work. If the best development is to be expected, all the child's comings and goings must be ordered according to the governing principles. The summer camps for boys are eloquent demonstrations of systematic direction, and still another illustration of the new bent has developed within the past few years.

Upon a beautiful estate in Andover, Mass., ideal surroundings are provided for the children, and every conceivable form of indoor and outdoor sport is made possible. This spacious summer home belongs to Mr. William M. Wood, and is named "Arden." The estate comprises eighty acres of most diversified scenery, and in its completeness of landscape effects, up-to-date improvements and farm productions, is like a little world by itself. Almost everything in the

form of necessities, comforts and luxuries may be found on this estate, and the entertainments for children are but the outgrowth of the idea that there shall be nothing lacking for health, pleasure and progress.

The house is built upon elevated ground, with ample piazzas commanding good views in all directions. Broad avenues lead up to it. There are beautifully kept lawns and numerous flower beds. In front of the house is a small grove of pine trees fitted up with swings and seats. This is a favorite resort of the children, especially on warm days.

A stone's throw beyond is a grassy field. It is surrounded by a green fence and contains a cluster of white tents that stand out boldly by contrast with the surrounding verdure. With the comfortable house close by, its long green blinds suggesting coolness and good ventilation, the need for camping out does not seem vital; but it was found that several years ago when the outdoor entertainments for children were inaugurated, the demand sprang up for outdoor sleeping quarters. This "fresh air movement" soon proved so beneficial to the children that it was afterward adopted by the grown-ups, which swelled the number of tents to a fair-sized encampment. The good



A GAME OF TENNIS AT "ARDEN"

In the background are the tents used by all the family for sleeping outdoors



THE CHILDREN'S HOUSEKEEPING

Preparing a mid-day meal



results for the adults have been equally marked.

A wide avenue leading some distance from the house stops at the shore of a beautiful artificial pond or lake, a resort of infinite possibilities for the boys. Its banks are fringed with large willows whose spreading branches droop over the water and mirror themselves in its clear surface. In the center is a picturesque island which forms a landing place and an objective point for the young oarsman. A quaint rustic bridge spans the outlet of the lake through which the water pours in a picturesque cascade.

It is not necessary to enumerate the many pastimes and sports that such a body of water suggests. Canoeing, rowing, sailing, bathing, — these are among the enjoyments that this lake at "Arden" affords, and that every advantage is taken of the pleasures it offers may not be doubted for a moment.

At the farther end of the lake is another point of keenest interest. In a prominent position, close to the water's edge, stands a medium-sized building with a broad terrace giving upon the lake, where, on warm summer days, when the sun is too hot for sports in the open, the boys and girls sit and cast their fish lines into the water. But it is inside of this building that its novel feature is to be found. With the walls and ceiling hung with Japanese lanterns, it presents an attractive oriental effect, and the stage at the end, equipped with drop curtain and footlights, explains the use of the room. It is named the "Arden Theater," and is the scene of the jolliest times for the children. Within its walls they give their little plays and other performances, many of which are original, and they are encouraged by their elders toward high standards of presentation.

The stairs at the entrance end of the building lead to an interesting room in the upper story where



THE BUILDING WITH OPEN TERRACE NEAR THE OUTLET OF THE LAKE

an entirely different phase of development is provided for. Complete equipment for the Sloyd system of manual training is found here, and at certain hours of the day there is a busy sound as the children ply their tools in the construction of simple articles of use. They take great pride in pointing to the products of their small fingers displayed on the shelves. These feats have all been accomplished under the direction of an instructor, who has his hands full with the little folks on the estate as well as those in the neighborhood who are invited to share in this pleasurable and instructive occupation.

Manual training is not the only subject of instruction that is pursued during the summer. There is a schoolroom in one of the buildings over



INTERIOR OF THE "ARDEN THEATER"

At the left is a Japanese Tea Booth



CANOEING ON THE LAKE

by the farm where regular daily sessions of school work are held. It is not deemed wise to neglect the minds of the children, but precautions are taken against overtaxing them mentally. The studies taken up are not abstruse and the hours of study are short.

In the stable are stalls full of horses and ponies and donkeys for the children to ride and drive, and not far away are the hurdles for

the sport of the family and their guests and for exercising the many horses of fine breed owned by Mr. Wood.

It was probably with the knowledge of the attraction between boys and orchards that a queer little house was erected in a grassy field just on the edge of the fruit orchard. In this convenient spot, somewhat secluded, the boys and girls enjoy a unique form of sport. It is the children's

domain and they are allowed to gather under its hospitable roof on special occasions to cook their own dinners. When prepared to their tastes, the meal is served in the open, picnic fashion, and the boys and girls are their own waiters. Could a scene of more jollity and freedom be imagined than the one these young boys and girls present at their own dinner under the apple trees?

How to Furnish a Bungalow.—III

Selecting the Table-ware

BY FLORENCE FINCH KELLY

FROM the four corners of the earth come marching long processions of table-ware that seem to have been made for the special needs of the bungalow dining-room. The variety is so bewildering that the only difficulty lies in the necessity of making a selection out of so many charming and appropriate things. If she likes, the mistress of the bungalow can carry out with her table-ware any one of a number of color schemes or quaint decorative ideas, or she can make of her dining-table, spread with appropriate wares, a part of a Dutch room, or a Spanish room, or a German room, or a Japanese or a Chinese room. Or, if she wants to make her dining-room merely quaint and homey, with a bit of the *bizarre* flavor that seems always to add just the necessary tang to bungalow furnishing, she can pick and choose from the offerings of half the

nations of the earth. Precise persons might say that such a method makes of the dining-table too much of a mixture, — a geographical hash. But it is a much more economical method; the table furnishings thus brought together are much more interesting; and, being so diverse, one does not weary of them.

Each item upon a table thus spread from so many different sources has its own story to tell of the country whence it comes, the way it was made, and the uses to which it would have been put in the home of peasant or artisan had it not journeyed to America instead. Perhaps the most satisfactory method is to select a number of pieces of some desired color and decoration and, using these as a basis, finish the complement of table-ware with harmonizing or contrasting selections from here, there and everywhere. Then there



GERMAN WARE OF VIGOROUS DESIGN AND COLOR
Decoration of Light Blue and Dark Reds and Greens

can be added at pleasure odd little bits that have a sufficiently piquant interest to be their own warrant.

Practically all the table-ware suitable for the bungalow dining-room come in broken sets so that one can buy as much or as little of each as one pleases. A great variety of patterns, and all of them quaint and charming, can be seen in sets varying from \$20 to \$40 for the entire set of one hundred and sixteen pieces. Any of these prices makes quite reasonable the cost of single pieces. The tulip pattern, in a stiff, bold design, is one of the prettiest and most appropriate that can be found anywhere. Some of these show the flower in bright and dark shades of yellow and others in red, each with its stiff green leaves beside it. On the plates the pattern springs from one side and reaches half across, while on the pitchers the tulips, rising singly from the bottom, are set on stiff stems at intervals all around the body. One very *bizarre* pattern has a crowing rooster, gay in red and yellow, strutting in the center of plates, while an intricate decorative pattern of checks and

circles and tangled vines and flowers in dark red covers most of the rest of the surface. Another has the German rose in blue and red with sprays of green foliage scattered all over the pieces. The cherry decoration, showing bunches of luscious-looking red fruit with green leaves, is seen in another set. The Siam pattern is an all-over decoration in blue of flowers, leaves and vines intricately mingled together. In rich blue also is the Ferrari design with its water views and sailboats and placid people on shore.

A very dainty breakfast set in a pale grayish blue Gernian ware, solid color, comes at \$5.50 for sixteen pieces. A similar set, with gilt handles, knobs and edges, is a little higher in price. There are a great many separate pieces in solid colors, mostly of German make, that have the striking little touch given by a bit of gilt decoration,—such as cream pitchers in a rich, soft pink with gilt handles, and sugar bowls in green and white with gilt handles and knobs. In the sturdy German ware one can find an army of tea, coffee and chocolate pots, some with the lower half in rich



ENGLISH WARE
With Decoration of Dark Blue and Maroon Flowers and Light Green Leaves

brown and the upper part a terra-cotta pink, and others in a creamy yellow and terra cotta. They range in price from twenty-five to ninety cents according to size. The tiny German beer mugs make attractive after-dinner coffee cups.

The red-pepper pieces are quaintly decorative, and are very striking when used in combination with dark blue tableware. The pieces are twenty-five cents each and come in a variety of shapes for a variety of uses, — salt and pepper shakers, mayonnaise bowls, mint sauce bowls, relish dishes. New salt and pepper shakers, of Japanese make, appear as diminutive ears of corn. Of German make are some unique fruit plates in solid colors,—the colors remarkably soft and pretty, purple, pink, yellow and red,—with fruit of various sorts in low relief in a contrasting color.

In Chinese and Japanese wares there is a world of beautiful things to choose from, and none of them need be very expensive unless one wishes to buy the fine sorts. In the very striking bright red wares one can find a variety of pieces. There are large, shallow bowls at \$1.50 each, with decorations, used sparingly, of white water lilies or chrysanthemums and a green leaf or two. They are suitable for fruit bowls or salad bowls and can be put to a number of uses. Matching these are chocolate pots and teapots

ranging from one to two dollars each, according to size. One can get a line of pretty plates at from twenty-five to fifty cents each in pale blue, mauve, green or yellow, each with a spray of Japanese lilies in white and green lying half across it. Others have decorations of Chinese jugglers or of Japanese gardens with women and children walking about, or they are covered with a dainty rose pattern. In the Kochi ware, either green or yellow, with decorations of Chinese lilies, there are pretty breakfast sets at \$7.50 for twenty-two pieces.

A certain heavy Spanish ware of peasant make is attractive and appropriate for the bungalow table. Not many of the shops keep it, and unless one knows about it and makes persistent inquiry, it is difficult to find. It comes in only two colors, both solid, green and brown. There are sturdy, uncompromising pitchers with flattened noses, squat vases and bowls and cups, plates and saucers, that look as if meant for rough usage. The pieces vary from twenty-five cents to a dollar each.

Woodenware offers many possibilities for the bungalow. There are lacquered Russian bowls, quite barbaric in color and just *bizarre* enough to give a distinctive touch to the table or the sideboard, that can be made to serve as fruit or salad bowls. Matching these are the lacquered wooden

spoons varying from five to twenty cents each, that are useful for sugar, for nuts and for berries. Among the peasant wares brought from Russia and also from Sweden and Norway are quaint wooden plates, thick and sturdy, with carved letters and decorations, that make handsome bread plates. If there be in the family a clever hand at sketching, the ordinary wooden bowls meant for kitchen use can be



ORNAMENTAL TABLE-WARE DISPLAYED IN THE HALL OF A BUNGALOW

decorated with a pyrographic outfit with views of the bungalow, or from the bungalow windows, and made to do duty and arouse interest on the bungalow dining-table. In the Indian shops are baskets made by the Indian tribes of the West and of Canada, many of them of very skillful craftsmanship, which can be put to a number of unique uses upon the table,—fruit baskets, nut dishes, receptacles for rolls, baked potatoes, muffins. From Alaska come wooden spoons of Indian make and crude decoration, usually in red, that make good salad spoons.

After all, nothing seems quite so perfectly appropriate for the bungalow table as old pewter or copper mugs and platters and jugs. By dint of

close watching of the antique shops one might get together at least a partial table service of that sort. And it is always possible to pick up, here or there, a mug, or a pitcher, or a plate to add variety to the table furnishings and ornament to the sideboard. But the best place to buy copper wares is in the Russian metal shops on and near Grand and Allen streets, in the East Side of New York. There one can find tall, two-handled cups, long-necked pitchers that make stunning coffee-pots, large, squat bowls, trays, candlesticks, samovars, and a great variety of articles, either made in Russia by the peasant workmen or in the basements of the shops by workers who learned their trade in Russian villages.



A French Faience Table Set with Pink Edges and Tulip and Rose Decorations of Natural Color

AN ORIGINAL AND DELIGHTFUL DIVAN or settee can be made by the use of four crib mattresses. These come 2 feet 6 inches by 4 feet 6 inches in size, and can be bought at prices ranging from \$2.50 apiece, for the quality known as "soft top," to \$4.50, \$6.00 to \$7.50 for different grades of hair filling. I have only known of their use in one household, but they deserve wider popularity. Those particular ones were covered with olive-green corduroy, and were used as a square pile of cushions against the wall—a very comfortable seat. For more luxurious loafing one was turned up to serve as a back, the remaining three making a low divan even more comfortable, but slightly less formal; or, best of all, they were divided again into two groups of two each, which, against the house wall or rail of the wide piazza, with plenty of sofa pillows, made the most luxurious sort of lounge for lazy smokers. A single one made both back and seat when placed endwise against a supporting

pillar, and laid end to end they were often used by the sons of the house for beds when moved to sleep on the piazza of hot summer nights. They can be easily carried in sections to any corner of the house or garden; their springs never give out; in fact, nobody who has not tried them can realize their use and comfort. M. H.

VENTILATION OF LINEN CUPBOARDS.—Air can be introduced into laundered linen if the fronts of the drawers into which it is laid are pierced by one or more small holes. These can be of decorative shape and should have cheese-cloth stretched tightly over them on the inside to prevent the entrance of dust. One housewife insisted upon an opening on the outside wall of her house, admitting air to the backs of the linen drawers, but this is not necessary if the above apertures are provided and if the room is kept reasonably aired by means of the windows.

THE INDOORS AND OUT SERIES OF MODERATE-COST DWELLINGS

Especially designed by Skillful Architects for Readers of this Magazine

NUMBER ONE

A Concrete Villa on a Hillside

BY MANN & MACNEILLE

THE problem of building a house on a hillside is one often met with and solved more or less successfully, according to the resource and taste of the architect and owner. If a more successful method than has hitherto been adopted were found of designing a house to fit the peculiarities of such a site, there would doubtless be more houses built on hills, and thus more building sites, now considered unavailable, turned to account.

A hillside location offers many advantages that one upon a plateau or a low-lying plain does not afford. A house well up on a hillside has a breadth of outlook and a circulation of cool fresh air that a house in a valley does not, and yet a hillside house is more protected than would be one built on the summit of a hill. We offer as one solution of this problem a house built of concrete in the Italian style of architecture.

On the opposite side of the house from that shown in the drawing, the ground is on a level with the first floor, and the exposed side slopes so rapidly away that it is some ten feet lower than the driveway, so that it is possible to place the servants' bedrooms in the basement story underneath the kitchen. Even in this location, on account of the difference of ground levels, they are above the ground and are light and airy.

Terraces are extended to the right and left and afford opportunity for serving of afternoon tea and cool breakfasts in the open air. The terrace adjoining the kitchen is especially adapted to this purpose, on account of its location.

The first floor plan is characterized by simplicity of arrangement, and provides a large living-room with deep fireplace and windows either

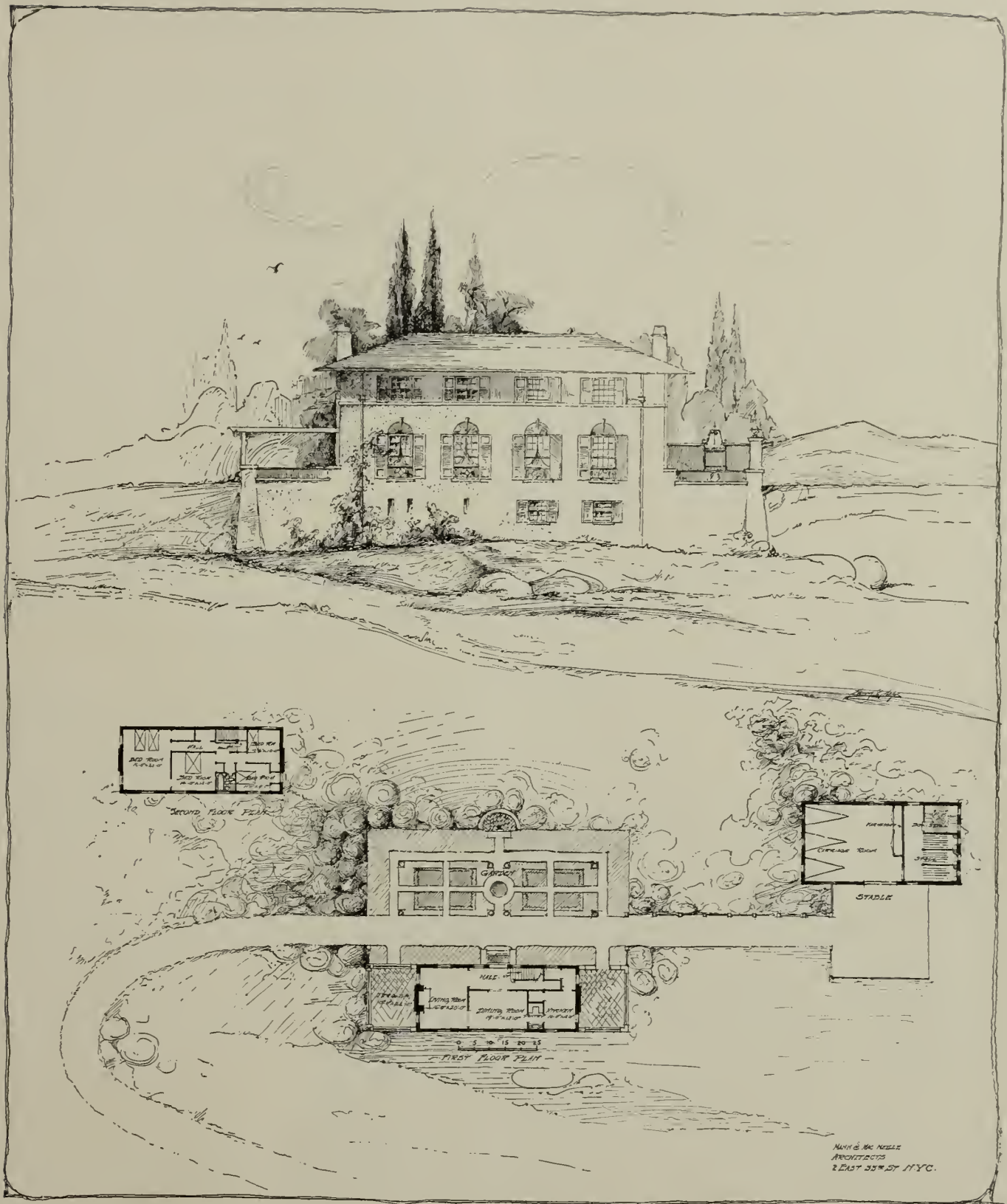
side of this fireplace opening down to the floor, through which one passes to the left-hand terrace. A butler's pantry separates the kitchen from the dining-room, and the entrance hall with its staircase is centrally located, enough removed from the living portion of the house that people entering and departing need not disturb social gatherings.

On the second floor there are four good-sized bedrooms, a bathroom and ample closet space. Above these rooms there is some three to five feet of attic space, which acts as an insulator from the hot rays of the sun, giving the second floor rooms the coolness desired.

It is possible now to furnish the interior of such a villa as this, with the charming old Italian furniture, without the expenditure of a large amount of money. There have been of recent years native Italians who have traveled through their Fatherland collecting old furniture, which they bring to this country and sell either to the antique dealers directly or to individual purchasers. When this furniture is bought directly from the importers its cost is far less than when the necessary profit is added by the antique dealer. Such furniture would make the interior of this villa most distinctive.

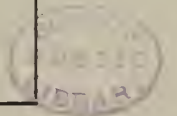
In the living-room there should be an antique gilded frame mirror over the mantel-piece with gilded carved altar candle-sticks on either side and no other ornament; and in this room the chairs should be of Circassian walnut upholstered with antique brocades, and there should be a walnut library table with the bare wood polished and a small mat of gold cloth in the center.

Where it is possible on the uphill side of



A VILLA DESIGNED IN THE ITALIAN STYLE AND TO BE
BUILT OF CONCRETE UPON A HILLSIDE SITE

MANN & MACNEILLE, ARCHITECTS



the house a beautiful, though inexpensive, Italian garden can be laid out as shown, with a sun-dial placed as a center of the semi-circle opposite the entrance, and a little pool of water with goldfish located between the dial and the porch.

This house has been designed in a manner to keep the expense as low as possible. The unbroken roof surfaces, the plain, rectangular shape of the building, and the absence of meaningless ornament, all contribute to this end.

Improvements in cement construction and the greater familiarity with its use make it now possible to build a fireproof or semi-fireproof dwelling at very little additional cost over that of its wooden prototype.

We give herewith an itemized estimate of the cost of this building, contemplating its construction of concrete walls and floors, with the exterior covered with stucco.

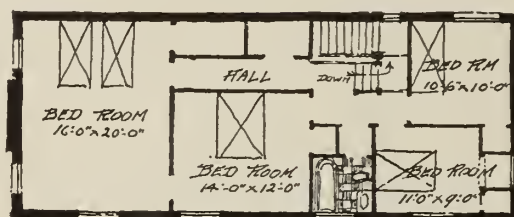
Excavation	\$62.50
Tile and ditching	40.00
Concrete footings	45.00
Outside block walls	612.00
Interior partitions of frame	185.00
Cellar and porch floors	100.00
Reinforced 1st and 2d floors	300.00
Main roof, frame	500.00
Shingling	150.00
Stairs	100.00
Tile bathroom floors and marble wainscoting	100.00
Fireplace	60.00
Plastering (on furring for outside walls)	200.00
Flashing leaders and gutters	20.00
Hardware	40.00
Mill work	650.00
Painting	250.00
Block machine	350.00
Block machine shed	150.00
Scaffold, tools, etc.	100.00
Foreman	800.00
Builder's commission of 10%	500.00

\$5,314.50

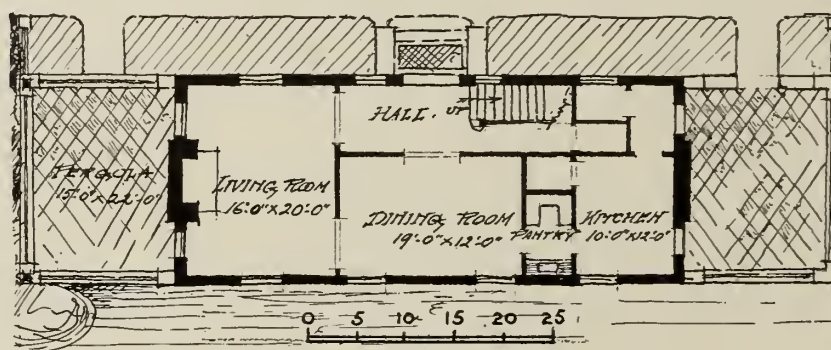
TREES VALUABLE PROTECTORS OF HIGHWAYS.—Not only do trees protect travelers on the highway by offering shade from the sun and shelter in case of sudden showers, but they protect the road itself. In preserving moisture and breaking the force of winds they prevent the fine surface from drying up and

blowing away. These figures are based on the assumption that sand or gravel suitable for mixing the concrete can be found on the premises, and it is also based on the assumption that Italian masons will be employed, except the foreman, who should be an intelligent, wide-awake American.

Italians are good for this class of work, not alone because their wages are much less than those of ordinary masons, but because they understand this kind of work better than any other



THE SECOND FLOOR PLAN



THE FIRST FLOOR PLAN

nationality, as the Italians have been making concrete buildings for centuries.

The exterior stucco covers the joints of the cement blocks and produces a uniform surface. It can be colored, either by a pigment mixed into the stucco, or by the final application of a tinted lime-wash. A cream color, for example, would be agreeable, if surmounted by a roof of dark brown or moss green. Or, a gray, if rendered "warm" by the addition of yellow or red, would make a fine background for the Italian light green shutters and would harmonize well with both the light-toned Lombardy poplars and the dark evergreens.

blowing away. The Massachusetts Highway Commission is strong in its advocacy of native trees, rather than imported ones or those from even a slightly different latitude. In this State the sugar, Norway and white maples have been successfully used, also elms and, when the soil is suitable, oaks. In a few localities pines have thrived.

The Best Vines for Decorative Use

PRACTICAL ADVICE AS TO THE MOST TRUSTWORTHY VARIETIES AND THE PURPOSES
TO WHICH THEY ARE BEST ADAPTED

By ERNEST HEMMING

THERE are greater decorative qualities in vines than any other kinds of plants. With their assistance an unsightly object can be converted into a thing of beauty and a gaunt, unhospitable looking structure into a charming house. However small the place there is always room for a few vines; in fact, the smaller the place the more need of them. Even if the grounds are so restricted as not to allow of the planting of trees and shrubs, a vine-clad porch is a possibility.

Occasionally objections are raised to the use of vines around the house. One hears that "they draw mosquitoes," "make the walls damp," "injure the structure by growing into the crevices," and similar remarks. But such objections are more fancied than real. If the locality is infested with mosquitoes the insects will be found just as troublesome on a porch which has vines as upon one without vines; and as for making the walls of the house damp, if any one will take the trouble to examine for himself, he will find the reverse is true. They are really a protection from the weather. A wall covered with vines will be found to be dry after a rain. The leaves are so arranged that they shed the water and prevent it from reaching the wall and soaking in, as it would if no vines were there.

Many of the old ruins of Europe owe their preservation, to a great extent, to the protection given by the ivy. Of course it is not good to allow strong growing vines to overrun a building, growing into the crevices and stopping up the rain spouts. All things worth having in this world

cost something, and the trouble we take in caring for our vines and keeping them within bounds is the price we have to pay for the enhanced beauty of our surroundings.

VINES FOR THE VERANDA OR PORCH

Roses are so popular we will consider them first. Perhaps the well-known crimson Rambler, owing to its vigorous growth and free flowering qualities, should come first on the list. The only objections that can be raised against it is, when the blooms begin to get old they fade to an unpleasant purple and the foliage is subject to mildew, especially if the weather is cold and wet. Even with these drawbacks it is a grand thing and hard to beat. The white, yellow and pink Ramblers are usually not very free flowering.

Rosa Wichuraiana and its varieties are not used as much as they should be. They have many good qualities when in bloom, and the bright, attractive foliage insures their looking well when out of flower. Dorothy Perkins, a charm-



THE DAINTY *Akebia quinata* CLINGS PRETTILY TO THE END OF THE PIAZZA ROOF

ing shell-pink color, and Alberic Barbier, creamy white, are two good double ones. Jersey Beauty, buff colored, and Pink Roamer, pink, are two good single-flowering ones. The flowers are borne in clusters and literally cover the plants when in full bloom. Roses bloom in late spring or early summer, so that fall-blooming vines should be planted in combination with them.

The *Clematis paniculata*, with its clusters of small star-shaped flowers and delicious fragrance, is perhaps the best companion for the roses. Of course it is equally attractive alone; it is so graceful and pretty it looks well anywhere. Unfortunately, the varieties of large flowering clematis do not seem to thrive very well in America. There are thousands imported annually, but it is seldom one sees a good specimen in bloom. The ac-

companying illustration is a white flowering variety, *Clematis Henryi*. The best known kind is *C. Jackmani*, which has a rich purple color.

Akebia quinata is a pretty vine to use where something not too dense is wanted. Its beauty is entirely in its foliage, as the flowers are hardly noticeable.

Every one knows the honeysuckles. The Japanese or Hall's honeysuckle is the best, for it is fragrant and is almost a continuous bloomer. The Chinese has reddish leaves when they first come out in the spring. Then there is the common honeysuckle, which is almost evergreen, and its variety with golden variegated leaves. A combination of the different kinds gives a pleasing effect. The coral honeysuckle has a charming flower, but is not a very free grower.

Where the porch is large and has stout columns, vines with good-sized leaves and bunchy growth may be used. The trumpet vines, *Bignonia radicans*, *B. grandiflora*, are useful, and so is the Dutchmen's Pipe vine, *Aristolochia Siphon*, sweet-scented flowering grape, *Vitis riparia*, also *V. heterophylla varietata* and *V. Coignetiae*. The former has variegated leaves and the latter glorious autumn coloring.

All of the above are comparatively fast growing vines, but can hardly be depended upon to cover a porch the first year. The better way is to plant an assortment of permanent vines with an eye to the future, and sow annuals such as *Ipomoea* and *Cobaea*, to relieve the bareness until the better varieties establish themselves.

VINES FOR FENCES

Fences are often a necessity, but there is no reason for them to appear unsightly when they are so easily clothed with vines. Honeysuckles grow so rapidly and are so easily kept trimmed, there is nothing much better, especially if the position is at all shady. Rambler and Wichuraiana roses are good if the position is open and a little time can be given to training and tying them in.



Clematis paniculata GIVES A HOSPITABLE GREETING FROM AN ENTRANCE PORCH



FRUITING GRAPES, SUGGESTIVE OF LIQUID REFRESHMENT, SPREADING THEIR SHADE OVER AN OLD ARBOR

VINES FOR PERGOLAS.

Any vine may be used to cover a pergola, but the *Wistaria* stands first on the list by virtue of its easy adaptation. The long pendulous flowers are shown off to the best advantage when supported by the light timbers, and its vigorous growth may be allowed to grow unrestricted.

Grape vines, both the fruiting and decorative varieties, are especially useful. The old-fashioned grape-arbor covering the pump shows their possibilities.

Among annuals the ornamental gourds are interesting, exceedingly picturesque and entirely suitable for covering pergolas. They grow rapidly and may be used until the permanent vines have monopolized all the space.

CLINGING VINES FOR WALLS.

The list of vines that will cling of their own volition to a wall is not a very extended one, so

there is not much choice. The Boston Ivy or *Ampelopsis Veitchii* easily heads the list. It is of rapid growth, clean, has good color in the autumn, and will thrive on walls with any exposure, but of course does better where it gets sunlight a good portion of the day. *Ampelopsis quinquefolia*, Virginian creeper, is not unlike the Boston Ivy, but the leaves are more uniformly divided into five lobes or divisions and they stand much farther away from the wall.

Occasionally one sees a wall covered with English Ivy. It thrives best on a wall with a north aspect, or in a position where it is not much exposed to the sun. It can hardly be induced to cling to a wall that becomes hot when the sun shines upon it, and the foliage usually turns brown if the sun shines upon the leaves when they are frozen. It is a good plan to intermingle the Boston and English Ivy; the foliage of the former then acts as a protection during the sum-



Wistaria sinensis PLANTED IN A POSITION WELL ADAPTED TO IT

mer, encouraging the vine to cling, then when the leaves of the Boston Ivy fall in the autumn there still remains the English Ivy for a winter effect.

HOW TO PLANT VINES.

Most vines are very free growing if they get get half a chance, but usually where they are planted the grouping is very poor.

Along the foundation of a wall the ground is usually filled in with all kinds of rubbish and is very dry. The overhanging eaves and walls above keep most of the rain off, so that care should be given, when planting, to supply good soil and keep the vines watered in order to give them a start. Always prune well back, especially in the case of clinging vines. It is only the new

growth that will attach itself, so that the lower down it starts to climb the better.

Of late years nurserymen keep a stock of vines established in pots; these are always preferable to field grown ones, as it is not necessary to disturb the roots when planting, and they can be planted at any time.

PRUNING VINES.

Each particular kind of plant requires a little different treatment in the matter of pruning, which can only be learned by observation. A pretty safe general rule is to cut away old wood and preserve the new strong growth. This applies especially to roses; when it is necessary to choose between strong young canes and old ones, always sacrifice the latter, even if it seems rather extreme at the time. Severe pruning should be the rule with vines.

It is a very common error to twist the young growth about the woodwork or whatever the vine may be growing on without thought as to how it is to be taken down should occasion require it for painting or repairs. If a trellis of wood or heavy galvanized wire, standing six inches away from



Ampelopsis Veitchii (BOSTON IVY) GROWING IN PARTIAL SHADE



THE BEAUTIFUL WHITE *Clematis Henryi*



Ampelopsis quinquefolia (VIRGINIAN CREEPER) COVERING AN ARCH

the wall of the house, is provided for the support of the vine, mischievous tendrils can be reached by the hand and headed off from entering the cracks of shingles or clapboards. Moreover, a painter can, on occasion, reach through the vine and back of such a trellis. An ideal arrangement would be a trellis which can be swung outward and carrying the vine with it while leaving the root unharmed. Heavy-growing vines have been effectively reared upon chains hung from a point high on the wall. A little forethought in this matter of supporting them will save many vines from destruction.



Mr. Clyde Fitch's Summer Home at Greenwich, Conn.

An Appreciation of Old Mahogany

(Concluded)

VI. How to Tell Old Furniture

BY ELLEN CADY EATON

I BELIEVE that there is no hard and fast rule by which one may learn to recognize good old furniture. I would say that a love for it would be the first requisite—a true appreciation of its beauty. If we have seen and admired one really good piece, a standard has been established from which to judge others.

First of all in buying old furniture, it seems to me we should consider form or shape, whether it is simple, graceful, harmonious in outline, for it must be admitted that some old furniture does not conform to this standard, but is, instead, ponderous, clumsy, over ornamented and lacking in the essential elements of beauty. Such pieces it is certainly well to avoid, and in this nothing but good taste will save us; but let me hurry over this point lest some one ask what the standard for good taste is and I be forced to admit that every individual has his own. In any event, much may be accomplished by studying good models, by giving sufficient attention to the subject to distinguish the different styles belonging to the different periods and makers, and gradually educating ourselves to the appreciation of the styles which are generally conceded to be most perfect.

Next in order, we should consider construction. While the general shape of a piece may be good, the construction or general make-up (if that term may be used) may be so coarse and common as to render it of almost no value. This, too, is a question of perception—the same quality of mind which makes one able to discern the difference between pressed glass and cut, and if this ability be lacking, we cannot begin too soon to cultivate it as it plays an important part in the qualification for this work.

The table given in the illustration was found in a New England kitchen. When I first saw it it was loaded with the week's washing and about all that could be seen was the bottom of one leg with its brass tip, but I at that moment decided that the table was mine

unless the owner should prove more obdurate than any New England woman I had yet encountered. The grooved leg with its brass tip was the key to the construction of the table, and a piece of that style could not fail to be of interest whatever the wood might prove to be. In this case it proved to be cherry, the front veneered with bird's-eye maple with a narrow strip of mahogany outlining the edge. It is in two parts, forming when together a good sized round table and can also be used separately against the wall.

After construction comes the question of wood, and this is perhaps the hardest of all to learn. It seems difficult for the average individual to learn to accurately distinguish different woods and to be even reasonably certain at all times that he knows mahogany when he sees it. Veneering, of course, it is quite easy to tell from the cross grain and figure of the wood, and the veneering on many of the old pieces proves a great help. I do not know of any way to learn to distinguish the difference in woods except to observe as closely as possible their grain and fiber and to cultivate that sense of perception which is finely discriminating. It is hardly to be wondered



AN OLD CHERRY TABLE

The front veneered with bird's-eye maple, a narrow strip of mahogany outlining the edges



RESTORED OLD CHAIRS
Found in an antique shop

at that the novice in this line does not immediately arrive at the goal of unfailing accuracy, for it is no uncommon thing for cabinet-makers and other wood workers to disagree on this point, and I have often known cabinet-makers to radically differ as to the kind of wood in an old piece.

I do not think, however, that this is as serious a question as it might at first appear, for it may be said as a general proposition that if the shape and construction are all that is to be desired, we may almost leave the wood out of the question, for if the shape is beautiful and the construction fine, we are almost sure to have a treasure, and I have found, too, that good wood and fine construction usually go together. While mahogany is, to my mind, the most beautiful of all woods, and most desirable in an old piece, we must remember that many of the good old pieces were of other woods which lend themselves very finely to the doing-over process. Some of the handsome old inlaid pieces were of other wood than mahogany, and we would certainly be limiting ourselves most unwisely if we were to insist upon having only mahogany pieces.

We have been instructed, from time to time, on the frauds perpetrated by dealers in antiques. While there are doubtless "tricks in all trades,"

I am inclined to believe that this phase of the question has been very much overdrawn. For instance, the common idea that antique dealers are producing new furniture and selling it as old is not only unfounded, but is self-evidently erroneous. Anyone who is informed on the subject knows that new mahogany furniture of good workmanship cannot be made to sell at the price at which old furniture is being sold to-day. The new is always higher than the old. What profit, then, could there be in making a fine reproduction, so good that it would pass for the old, and selling it for less than it would bring as a reproduction?

It is possible that the wonderful tales that are told of "manufactured antiques" refer to a kind of antiques not common in this country or to imitations of rare museum pieces which are worth a fabulous sum, but the uninformed believe that this fraudulent practice extends to all branches of the antique business, and that if one attempts to purchase an antique piece from a dealer he is quite likely to find himself possessed of an entirely new piece, or, at best, only half of an old one. This, I am sure, is a mistaken belief and does not in any way represent the custom of dealers, partly for the reason above mentioned. It is true that a large amount of "restoring" is going on all the time, and it is difficult to see how this could well be avoided, as we of this time had nothing to do with the education of the past generation, but the stories so frequently told, of tables or sideboards constructed from one leg, call for a too active exercise of the imagination. I believe that antique dealers, as a rule, are quite as honest as any other class of tradespeople. They will cheerfully tell you which are the new pieces, and unless you insist upon a "story," you are not likely to receive more fiction with your purchase than is common in ordinary business transactions.

The chairs given with this article are both products of the antique shop. Both are good examples of old chairs, and exemplify good shape, good wood and fine construction.



A "Darmstadt" House in America

WITH THE GRACEFUL CURVES AND PICTURESQUE ANGLES CHARACTERISTIC OF WESTERN GERMANY

CLAUDE BRAGDON, ARCHITECT

THE house of Mr. Albert Eastwood, Rochester, New York, illustrations of which are published herewith, exhibits a rather uncommon treatment of a common enough problem; the problem, that is, of a suburban dwelling of moderate size and moderate cost, on a deep and relatively narrow lot. The plan is one which, with various modifications, has been followed in many Rochester houses, being peculiarly well adapted to the locality, the usual shape of lot, and to the requirements of the average householder. The only original note, in so far as the plan itself is concerned, is the bow-windows at each end of the main hall. These contribute greatly to the effect of space and light, which is the dominant note of this apartment. The living-room, too, gains greatly in attractiveness by reason of the wide, deep bay, facing the west. So well do these various bays serve their purpose, that, ordinary as the plan is in the disposition of its parts, one is deceived into believing that it is a distinct departure from the familiar type. Apropos of this, it is surprising how few the number of good plans really is. The most unusual ones, if



THE ENTRANCE PORCH

With vaulted ceiling. The flower jars are of white terra cotta

they rigidly fulfill every practical condition, are generally found to be only clever variants on already familiar types.

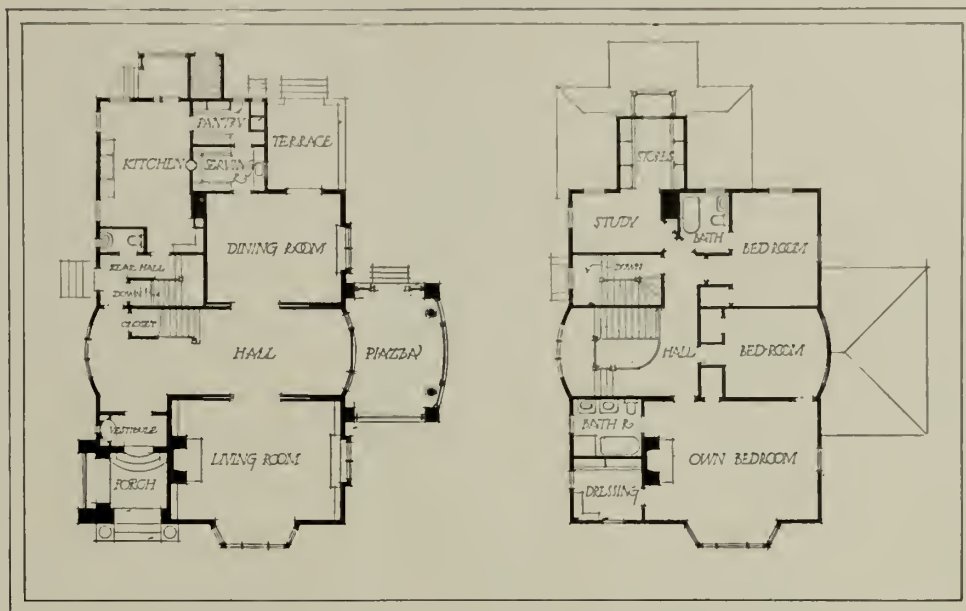
The house was designed, as every house should be, from the inside, out; that is, the plan was first determined upon, and the plan in turn determined the exterior, at least, in so far as the disposition of doors and windows and the location of piazzas and porches are concerned. Considerations of convenience and utility were nowhere sacrificed to "style"; and as a result, the house has a character, an individuality, which with a



THE STREET FRONT

Showing the spacious bay-windows to living-room and bedroom

more artful (in the sense of artificial) disposition of parts it might have lacked. An attempt has been made on the part of the designer to avoid the strict rigidity and rectangularity of line which is so constant a characteristic of American domestic architecture, hence the many curved surfaces, — in the bays, the piazza and the vaulted ceiling of the porch. To the same end the roof has been given a bend, just above the eaves, the dormers a "batter" and the chimney an "entasis." These things are felt rather than fathomed by the observer, but they surely serve to



PLAN OF THE FIRST FLOOR

PLAN OF THE SECOND FLOOR

enhance the total impression of suavity and grace. The exterior finish is of a warm gray stucco, the

woodwork is stained green, the sash are painted white, and the doors dark brown. The flower pots and the chimney tops are of white semi-glazed terra-cotta. This color scheme proves most felicitous against the background of old apple trees amid which the house is set.

One critic dubbed this a "Darmstadt" house, and another declared it to be an overgrown Voysey cottage; but though to a certain extent inspired by the German and English domestic architecture of to-day, it is not an exotic, but a natural and, as it were, organic growth of the soil of the city of western New York in which it stands.



THE NORTHWEST SIDE
Shielded by an old apple tree

A WINDOWED FIREPLACE. There is a curious and interesting feature in an old house which has been remodeled in Weston, Mass. The large chimney forms part of the partition separating the hall from the dining-room. Above the mantel shelf on each side of the chimney a part

of the brickwork has been removed and large sheets of heavy plate glass securely set into the chimney-breast. Sitting in front of the hearth, in either the dining-room or hall, one may watch the smoke, sparks and flames ascending from the wood fire beneath.

Home Fire Protection

BY FRANKLIN H. WENTWORTH

EVERY man who owns a country house, or a house in a small village remote from the protection of a properly ordered fire department, has to consider what he would do should his premises take fire. Most of us think of fire as we think of death; — both may occur to some other fellow every day, but not to us. There are thousands of country houses full of rare and beautiful personal possessions in which there is no single provision for extinguishing a fire except buckets, to be filled at the bathroom faucets or the kitchen sink. The owners of such houses seem, to those who have suffered loss from fire, singularly oblivious to a constant danger. A servant, in haste to answer the bell at twilight, drops an imperfectly extinguished match; the morning newspapers tell the rest. There are a hundred ways in which a fire may start, but we seldom think of any of them until it is too late.

Absolute fire-prevention is impossible. Fire is too subtle an element not to escape at times man's careless confinements. But it may at least be controlled, if taken in season.

The time to extinguish a fire is the moment at which it starts. Five minutes may mark the period which is to indicate simply a lively scare — or a homeless family. But in order to extinguish a fire in its incipency it is required that there shall be some ready agency at hand with which to do it. A bucket of water might answer, but the fire would then have to be so disposed as to be extinguished in a single throw. Besides this, we do not care to have water-buckets standing about in our drawing-rooms. Thus far the science of fire protection has evolved but a single device which at all meets the exigencies of the situation; it is the little three-gallon hand chemical fire extinguisher. This device is so simple, so easily cared for, and so inexpensive, considering its potential value, that the only apparent reason for its absence from any country dwelling or even any city home, is that the manufacturers of it have never really risen to their opportunities. They do not realize how good a thing they have to sell. It is not a patented device so far as its principle of operation is concerned, and it is therefore put out by a number of American manu-

facturers, who vie with one another in furnishing an extinguisher of attractive appearance and finish, which will not mar the harmony of the furnishings in any hallway or apartment.

Millions of dollars in values have been saved from fire loss by these little chemical tanks, which rest unobtrusively upon their supporting hooks or platforms, awaiting silently, year after year, perhaps, their call to service. They make the most amiable kind of a rain-god; for they can be supplicated, nay, compelled to deposit the desired moisture exactly when and where it is most wanted. No household deity of Greek or Egyptian mythology ever faced the fire fiend with such calm composure and such freedom from bluster as do these little moderns; and they do not have to be propitiated with priceless libations. Instead of pouring costly nectar before them, a cheap solution of bi-carbonate of soda is poured into them. A little bottle of sulphuric acid holds in leash the pent up energies.

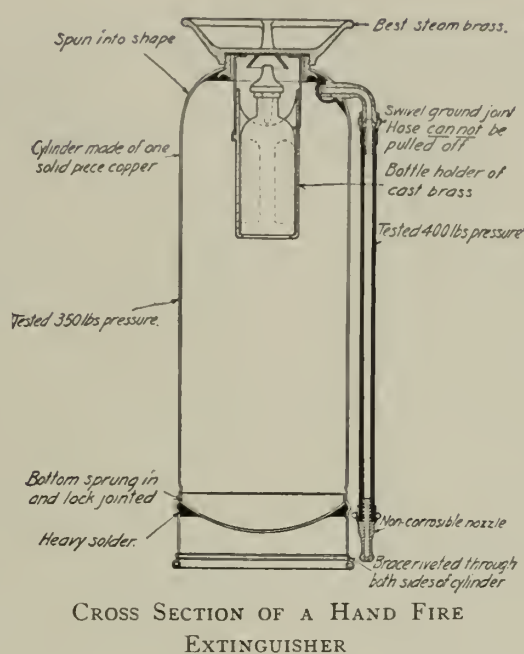
When sulphuric acid is poured into a soda solution, carbonic acid gas is liberated. This gas furnishes a fire-damping envelope as well as the power which projects the liquid. There is no possibility of the failure of this chemical action to do its work and furnish a good, strong stream if the bi-carbonate of soda and the sulphuric acid are true to their labels. An ordinary three-gallon extinguisher should throw forty or fifty feet. But pure chemicals are not the only requisite; the tank itself must be reliable.

The general plan of construction and operation of these little devices is as follows: A light copper cylindrical tank about two feet in height and six or eight inches in diameter is filled nearly to the top with water to which has been added, and which carries in solution, the bi-carbonate of soda. In the top of the tank is a bottle containing the acid. This bottle is so held mechanically that the opening is above the level of the soda solution. It is closed by a heavy, loose stopper which falls out when the extinguisher is inverted to play, allowing the acid to mix with the liquid and thus generate the gas. A proper hose connection is made in the top of the cylinder, to which a small hose, equipped with a suitable nozzle, is

attached. This hose outlet should not be closed by cocks or valves. Such devices should be left off altogether. A considerable pressure is generated in the tank, and one should not run the risk of failure due to a closed cock and hence no outlet. The perpetually open passage through a clear hose is a constant safety valve and thus obviates uncertainty of action. Long experience with these devices indicates that the safest proportion of acid to bi-carbonate of soda for a three-gallon extinguisher is from three and one-half to four fluid ounces of

acid, to from one and one-quarter to one and one-half pounds of bi-carbonate of soda. With such proportions a pressure ought not to be obtained under ordinary temperatures in excess of three hundred and twenty-five pounds, and all the tanks are supposed to be tested to three hundred and fifty pounds before they leave the factory. Although in all good extinguishers the bottle mechanism is so designed that the acid will be fed slowly and thus a sudden generation of the maximum pressure avoided, the initial pressure is great enough to make it a prime consideration of the purchaser of these devices that the tank shall not burst or the stream get clogged under any circumstances.

The virtue of the protection lies in these two features, — the holding strength of the tank and the uninterrupted working of the parts. Not only, therefore, must the copper shell be of adequate initial thickness to withstand any pressure to which it may be subjected, it must also be protected from the weakening corrosive action of the soda solution. The working parts and hose outlet must be similarly protected to prevent clogging. The undesired action of the soda solution upon the copper can be prevented by carefully covering all parts exposed to the liquid with an alloy of tin and lead. Unless this is well done, the life of the extinguisher, which should be almost indefinite, may be reduced to a few years. It may work very well at the end of the first year when discharged for refilling, and at some later date — perhaps at a fire — break or rip at a seam,



and discharge the liquid upon the operator, or almost anywhere except through the hose connection.

The purchaser himself is not wholly without responsibility. He should discharge and recharge the tank at least once each year; not because the chemicals may not operate at longer periods, but to demonstrate the integrity of the shell and the working condition of the parts. He must also protect the liquid from freezing if he expects to use it at a fire in winter. These points well looked after by a purchaser, —

and he should have no excuse for neglecting them, for they are blazoned in big letters on the shells, — he should be relieved of all anxiety as to the efficiency of the device in time of need. Any further responsibility should properly fall upon the manufacturers of the extinguishers.

Into the business of making chemical fire extinguishers, however, as into every other business not protected by patents, there may enter manufacturers who are more interested in the gleaning of immediate profits than in the lasting good repute of the devices they manufacture. These are the men, who, before now, have put out tanks made of copper under gauge; with shells poorly riveted or seamed, and with so shoddy and careless a coating of the shell and operating parts as to insure deterioration from the moment of filling. Such tanks are sold upon the virtue of their outside finish merely.

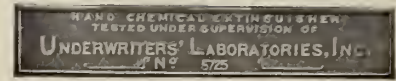
Against such devices the innocent purchaser is as helpless as was the purchaser of canned meats before the inauguration of government inspection.

Owing, however, to the interest of the underwriters in these extinguishers and their superior readiness to insure premises equipped with them, a plan of inspection was worked out in 1906 by the underwriters in conjunction with the most reputable manufacturers under which the engineers of the underwriters visit the factories in which these devices are made and inspect and pass upon every detail of their manufacture. The gauge of the copper, the tinning of the shell, the dimen-

sions, the character of the bottle mechanism, the integrity of the hose and its connections,—all these points are critically examined. Following such examination a hydrostatic test of the shells is made at from three hundred and fifty pounds to four hundred pounds pressure to prove their worth and character. There now exists the situation, therefore, in which the product of the manufacturers, who are willing to allow such inspection, is practically warranted to the public by a vigilant interest over which the manufacturer has no control. It is quite manifest that no manufacturer who is not prepared to put out a satisfactory product will permit such inspection of his regular run of goods in the factory.

On the other hand, it is quite natural that the reputable manufacturers should demand of the insurance interests some mark of identification by which the public may come to know and recognize the extinguishers with which so much care is taken. The situation is met by the use of a label. The underwriters' engineers detailed to make the inspections at the factory are furnished with small brass labels of the character shown in

the accompanying cut. When an extinguisher



passes the inspection and test successfully, one of these labels is soldered upon it in a conspicuous situation, and the tank goes out to the public carrying the voucher of its integrity upon its face.

It is undoubtedly true that as the public comes to know of the protection of this label the makers of tanks undergoing this factory inspection must inevitably command the markets, for the cost of the inspection service is so small as not to cut a figure in the selling price of the goods, and the intelligent purchaser will always avail himself of the protection furnished. No hardship is visited upon the manufacturer, for he is put upon the same basis as every other, and any manufacturer, new or old in the business, can secure for his factory the inspection service and the labels simply by proving his ability to make a satisfactory tank.

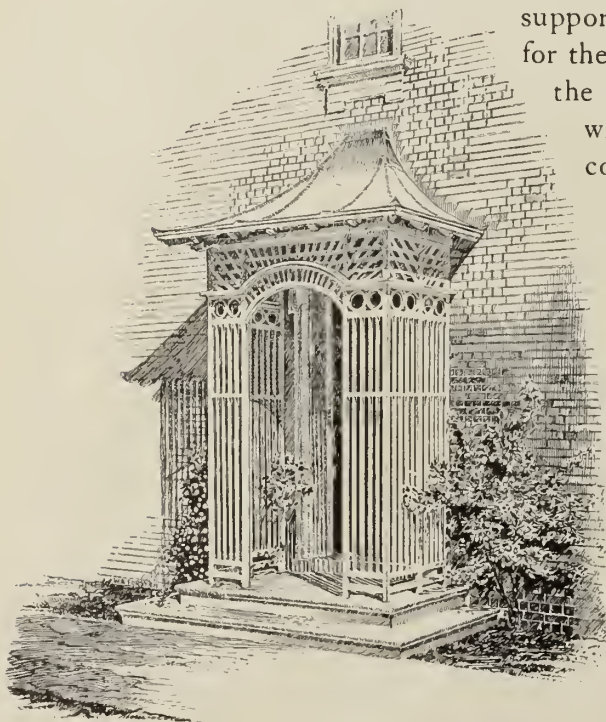
In these days of commercial dishonesty it

(Concluded on page XI)

A Latticed Entrance Porch

THE decorative value of the vine lattice or trellis is obvious, but the extent of the possible use of this device is little appreciated. As a means of supporting vines, it has an advantage over both a solid wall and the nearly invisible wire support.

And this for the reason that the trellis itself, when left uncovered by the vines, may be made ornamental. It remains for the architect to devise uses to which the lattice may be put. This



may be done, not only in attaching the lattice to the wall, but in forming a separate structure such as an entrance porch.

By the modest caller who must wait at a door in full view of the public highway, this architectural novelty will be welcomed. By the housewife, who seeks the best place on the outside of the dwelling for rearing vines, it will be made an object of great beauty. Many are the advantages of such a feature applied to the cottage. It offers protection from rain, in common with any entrance shelter; but it also gives protection from wind, while admitting a necessary amount of air that in summer is somewhat tempered by shade before entering the house. In the enclosure delicate indoor plants may be placed for a morning's airing without danger of injury; or a seat may be placed on each side of the door and pleasantly screened by vines. That such a porch may become a true ornament to the exterior of the house, relieving an otherwise barren wall, is shown by the illustration of a white trellis, highly decorative at the top, and surmounted by a copper roof that has turned a light green color.



The Home Grounds



A TUB WATER-GARDEN may be constructed by using large zinc tubs or molasses hogsheads sawed in two through the center. In the case of the latter it is well to elevate them to prevent the rotting of the wood, when in contact with the earth beneath. Three or four tiles laid on their side afford an excellent support.

One tank or tub may be used or four half hogsheads, grouping the three around the central one. As there is little beauty connected with the architecture of tubs and tanks, their sides should be hidden under a screen of stones or rocks, forming a miniature rockery. This should be masked in part with vines and flowering creepers. Ferns are excellent on the shady side, and on the north, where they will not shut off the sunshine, may be grown Bamboos, Papyrus, Umbrella Plants or other water-loving species.

In the central tub, or the one farthest back, may be grown a plant of the stately Lotus, which is especially suited for tub culture, because it bears its leaves and flowers erect and does not float supine on the water as do the water lilies. In each of the other tubs may be grown one of the day-blooming water lilies. If plants for the purpose are purchased of the florist, not more than one plant should be placed in a tub, but where the plants are grown from seed,—as may be done with most of the *Nymphæas*,—four or five may be planted in the tub the first year—one will be enough the second.

The blue and pink *Zanzibariensis* are especially suited to this form of culture, as they bloom early in June from spring-sown seed, and may be wintered under the benches or in a warm cellar, and started into growth the following spring. There are many minor aquatics which may be grown in tubs. Among these are the Parrot's Feather, which will trail gracefully over the edges of the tub; the Water Poppy, with its golden flowers; the Water Chestnut (*Trapa Natans*), with its white flowers floating on the surface of the water.

Not over half of the depth of the tub or tank should be devoted to soil. Use a good quality of marsh earth, loam and old, well-rotted manure; and after planting the lilies, cover the whole with clean, white sand to prevent the black earth from rising to the surface. Add a few fish and pollywogs to the aquarium and the health of the garden will be assured.

THE ROSE CATERPILLAR can be easily discovered by the leaf or two he glues together to form his shelter. There is no more effective way to pursue him than to inspect the bushes each day and pinch the nest between the fingers, thus crushing the caterpillar. The same way should be followed to destroy the rose bug. Other rose insects should be attacked by syringing, sprinkling with hellebore, or in the case of the red spider, which threatens the rose when reared under glass, by applying fumes of sulphur.

TREES FOR THE SEASHORE.—Continuous wind and none too rich a soil are conditions trees at the seashore must bear with, and there are certain types which will not only win in the struggle, but whose very appearance is appropriate for the trying situation. Small, staunch trees are the best. Shade is not so much needed at the shore as elsewhere, and the tall tree that casts it is often for whole days held woefully bent under a relentless gale,—not a pleasant sight, if, indeed, no real injury be done. Such trees are the Elm, the Ailanthus, the Honey Locust and Kentucky Coffee-Tree, which otherwise are supposed to thrive well at the shore. Far more suitable are the English Hawthorn, the Sea Buckthorn (*Hippophaë rhamnoides*), the Sassafras and the gaunt Tamarisk. If more shade be needed, there is the Swamp White Oak, the Honey Locust, Green Ash (*Fraxinus viridis*) and the white willow. Among evergreens, the Scotch and Pitch Pine and varieties of *Juniperus Virginiana* will be found satisfactory.



From · Our · Office · Window.

THE LABELING OF TOWNS.

Automobilists and other travelers in the country are constantly annoyed by the difficulty of identifying towns and villages through which they pass. So important a building as the post office is usually without a name plate; the bank and hotel likewise. The railway station, if it backs upon the public highway, gives no clue as to its name; and even on the side of the tracks, passengers must crane their necks to read a sign none too easily distinguishable. This need, which many have felt without realizing what was lacking, is remarkable for the ease with which it can be corrected. The expense is measured in terms of a paint pot. The government should be induced to bestow upon each post office a name plate, to be attached to the outside of the building. Railroads should be induced to label every side of their stations. In addition to this, local pride might be spurred by the influence of an automobile association to display the name of the town or village on the first and last buildings passed by the traveler on the main highway.

A HARBOR FOR PLEASURE CRAFT.

If the new harbor is completed by the Government at the northern end of what is now the town of Cape May, another convenience will be afforded small craft in making their way up and down the Atlantic Coast. Yachts, motor-boats and even house-boats will find a shelter there as they come up from Florida in the spring or, at the close of the outdoor season in the North, set out for warmer climes. The proposed new harbor will lie about midway between New York and Norfolk, and though not far, it is true, from the harbor of refuge at the Delaware Capes, it will offer, by reason of its smaller size a better shelter than the broad roadstead behind the Breakwater, where gales have damaged many a craft. So long as the Delaware and Raritan Canal remains far from being a satisfactory inland waterway, the outside route will be preferred in fair weather, when the intervals between safe havens are shortened.

The coastal waterway, which gives an inside

route from St. Augustine to Key West, and is nearing completion, will leave but a short stretch of open coast to be navigated by small craft in cruising the Atlantic Coast from New England to the Florida Keys.

CHICAGO WINS ITS LAKE SHORE.

In passing a bill authorizing the South Park Board to acquire the riparian rights of South Shore property, the Illinois legislature has enabled the city of Chicago to step at an important point toward the realization of its aim to become a beautiful city. The grand outer park and boulevard recommended by the Burnham plan for the city's improvement can be realized as soon as negotiations with the Illinois Central Railway are satisfactorily concluded. And it is hardly likely that that corporation will hold out against a reasonable plan of adjusting its right of way or thwart a popular desire to restore to the city what is rightfully its own by virtue of geographical position. If hundreds of belching chimneys render Chicago "a city without a sunset," there is no reason why it should be without the blue horizon of its Lake.

PRIVACY AT SEASHORE ESTATES.

Secure in the protection of that intangible palladium known as "fisherman's rights," visitors and picnickers have wandered at will over the rocks and sands of New England's shore. Somewhat irritating to these folk is a decision of the Massachusetts Supreme Court which sustains an owner of beach property in his right to protect it from invasion. The only course left to the commoners is to demand a public stretch of shore for the use of all. Such land must be purchased by the town exchequer to which both the commoner and the exclusive estate owner contribute, and the more shore the towns purchase the less there will be left for individuals to acquire; the higher also will be its price. But what matter? The pleasure of home privacy is not alone due to an undisturbed view of natural scenery. It needs as a necessary fillip the fact that it comes high. And there are plenty of persons who are willing to meet prices of seashore land, however high they soar.

Home Fire Protection

(Continued from page 146)

might well be desired that everything one buys, which one has not seen made, should bear some kind of voucher of its merits. Unfortunately, however, the public is not in position regarding the common things of consumption that it enjoys in respect of chemical fire extinguishers. In these tanks a strong financial interest is coincident with the interest of the purchaser, and in protecting itself, protects him. In most other commodities the purchaser must rely wholly upon himself. It is sufficient, however, for the purpose of this article to set forth the fact that the little chemical fire extinguisher is the most economical, efficient and reliable protection with which a citizen may equip his home, and that to-day owing to a happy combination of circumstances respecting this commodity, he may go into the market and really buy the thing he pays his money for.

Raising a Park

THE arrival at Chicago of the largest dredging machine in the world is hailed with delight by thousands of Chicagoans who have been looking forward to the beginning of the activities that are to redeem twenty-seven submerged acres of land for Lincoln Park.

When the improvements are completed, Lincoln Park will have one of the finest yacht harbors in the world. The entire north end, which is to extend a mile beyond the present boundaries, will be given over to playgrounds, tennis courts, golf links, baseball diamonds and roadways for automobiles, carriages and bicycles.

"We are going to make one of the world's greatest playgrounds out of Lincoln Park," says President Francis T. Simmons of the Park Commission.

For this reason we have planned the harbor and the sand beach. We want to transform the park into a big lakeside resort."—*Chicago Evening Post.*

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Their construction has been constantly improved and is of the highest mechanical excellence.

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Boating Bungalows



CHARMING surroundings, with every condition for comfort and ease rather than architectural merit, are the distinguishing features of these two water-side bungalows.

The English people "go in" for comfort, especially in their holidays; and it is not difficult to imagine a delightful day's idling up and down the river in the punt, or lying at ease in a reclining-chair on the shady porch with a book, a lemon-squash "and thou beside me," watching the life on the river. On race days the scene must be a lively and a beautiful sight to watch. There is far more of this river life in England than in this country. It is hard to understand why more of it is not indulged in here, though perhaps mosquitoes would spell a large part of the answer. Surely that obstacle is far from insurmountable to the American people who have accomplished such far more difficult reforms, and the day may not be far off when many of these pleasant holiday homes will be found on the hundreds of splendid rivers of this country.

A School for Would-be Motorists

IN a large, glass-walled room on the second floor of a building just off Broadway, not far from Columbus Circle, fifty men of all ages are working over queer looking sections of machinery, more or less intricate. On trestles set in the middle of the room, rest half a dozen disreputable looking automobiles, with tonneau removed to permit a better view of the workings of the rear axle. On every side are carbureters, cylinders, gear-boxes, magnetos, batteries and spark-plugs. The evening "demonstration class" in the largest training school for chauffeurs, recommended and assisted by the Automobile Club of America, is in session. Many of those whose intention is to dispense with a chauffeur are working side by side with the men who expect to earn their living for the remainder of life from the knowledge acquired at the school. Other wealthy men in overalls are comparing notes with their own coachmen, whom they desire to train, so that between them there shall be no necessity for the importation of a strange member of the household. Not a few of the pupils have been or are coachmen who fear the day when their occupation may be gone or who desire to secure the larger salaries that already reward the chauffeur. By far the largest class of pupils is supplied, however, by the country districts. Farmers' sons fond of outdoor work, yet anxious to try their fortunes in the big city, flock to the training school in great numbers.

During the past year a large number of college men, who expect to take up the sale of automobiles or to enter large firms that manufacture the machines, have become members of the class. They make a careful study of the mechanical construction of various cars and the fitting of parts, but comparatively few of them take the outside course (many of them are already good drivers when they enter) or trouble to secure certificates. In fact, despite the large

(Continued on page XVII)



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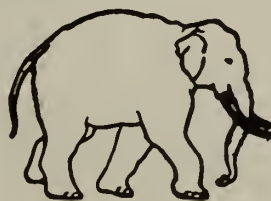
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(4) A FIREPROOF GARAGE
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IF a chauffeur and his family are to live in the garage structure (Fig. 1) there is less need to have it fireproof than in cases where the car is run into snug quarters and left to itself. Ordinary care in housekeeping naturally extends to the motor room, and insures avoidance of sources of danger, such as

loose matches, piles of oily rags, etc. With a view to rendering this oversight as complete as possible some architects plan to have the chauffeur's quarters entered only through the motor room. Figure 2 is low in effect, yet the entrance is skillfully arranged to accommodate the highest limousines. In Figure 3, the

first story being of brick, it is possible to have the ceiling of concrete construction, thereby rendering the motor space fireproof. Figure 4 contains tool and robe closets, toilet, and, on the second floor, a single room for the chauffeur. Its novel construction is the least expensive method of providing a fireproof garage.

A School for Would-be Motorists

(Continued from page XIII)

number of those who receive diplomas every year, there are so many rich business men who also take a part course, so as to know at least something about the cars in which they drive or are driven, that only fifty per cent of the pupils reach graduation. — *Charles E. Penrith in N. Y. Evening Post.*

A Textbook on Plumbing

THERE is no subject relating to house building more obscure to the average person and less understood by the average architect than plumbing. This vital part of the household equipment is often left to the rule-of-thumb "science" of a neighborhood mechanic who, if not actually recording his ineptitude by a plumbing outfit that fails to work, engraves his memory on the family doctor's bills. "Principles and Practice of Plumbing" is a book intended to enlighten the plumber on the scientific foundation of his craft and to recall to the architect's mind how consistently the laws of physics he has studied in the academy apply to the house he builds. It does far more than this. It gives precise data bearing upon the entire course of water and waste matter through the house. By means of clearly-arranged tables, it gives proved statistics, measurements, coefficients, formulæ and results of tests, all of guidance to the mechanic. Illustrations show the proper method of arranging familiar devices; cross-sectional views reveal the interior mysteries of every appliance needed for the private household and the public building. In treating with these aids of every portion of a plumbing system and its modern ramifications, with a view to making it sanitary, convenient, durable and sightly, the book becomes an authority for the technical man and of useful reference for the house-owner, be he technically minded or not.

*"Principles and Practice of Plumbing," by J. J. Cosgrove. 278 pp., 8vo. Illustrated. Standard Sanitary Manufacturing Company, Pittsburg, 1907.

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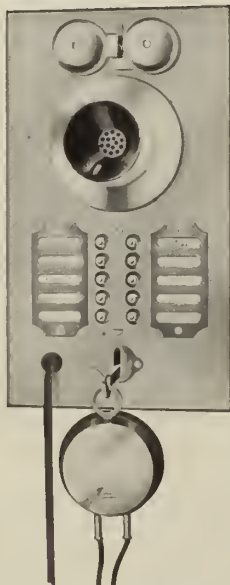
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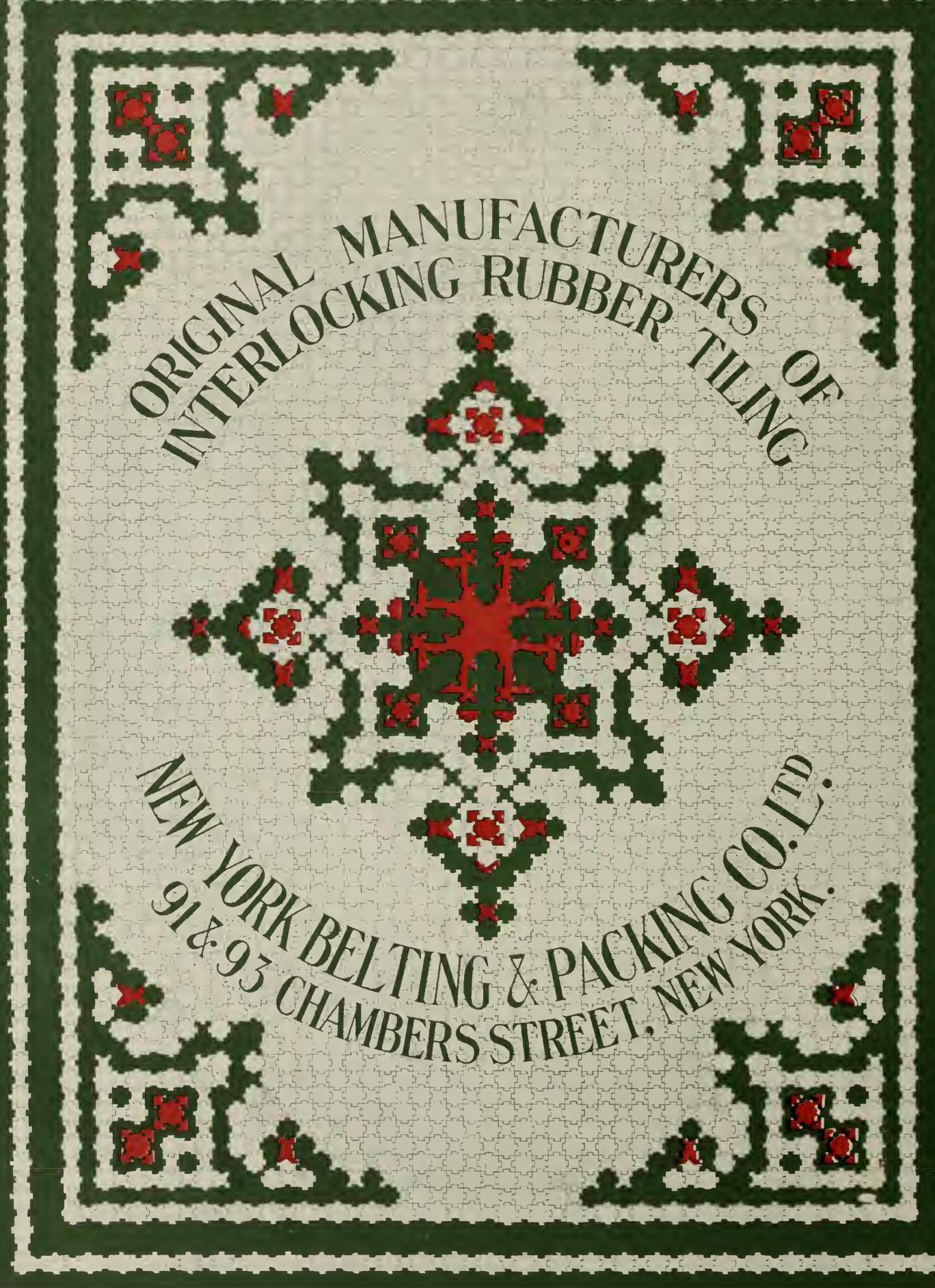
INDOORS AND OUT

THE
HOMEBUILDERS
MAGAZINE

JULY 1907



ROGERS AND WISE CO.-PUBLISHERS
NEW YORK BOSTON CHICAGO

The advertisement features a decorative border and a central geometric pattern. The border is composed of a repeating interlocking pattern of red and black squares. The central pattern is a large, symmetrical star-like shape made of the same interlocking squares, with a red center and black outer points. The background is a light gray color.

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Indoors and Out

A MONTHLY MAGAZINE DEVOTED TO THE BEAUTIFYING OF AMERICA
CHIEFLY BY MEANS OF ARCHITECTURE AND THE ARTS ALLIED TO IT

ROGERS AND WISE COMPANY
PUBLISHERS 85 WATER STREET BOSTON

NEW YORK
4007 Metropolitan Building
1 Madison Avenue

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Entered at the Boston, Mass., Post Office as Second-Class
Mail Matter, October 14, 1905.

CHICAGO
302 Ellsworth Building
355 Dearborn Street

SUBSCRIPTION PRICE \$3.00 A YEAR IN ADVANCE. FOREIGN SUBSCRIPTIONS \$4.00
SINGLE COPIES 25 CENTS

For Sale by All Newsdealers in the United States and Canada and by The American News Co. and its Branches

Contents for July

VOL. IV

1907

No. 4

BOATHOUSE OF THE AMPERSAND GOLF CLUB	Frontispiece
SOME AMERICAN CRICKET CLUBHOUSES AND GROUNDS.	By Churchill Williams 149
	(Illustrated)
OUR MOUNTAIN COTTAGE	By George Spencer Morris 158
	(Illustrated)
BUNGALOWS BESIDE FRESH WATER STREAMS	By Guilford Blake 161
	(Illustrated)
THE VERANDA AS A HABITABLE PLACE	By Bertha M. Howland 167
	(Illustrated)
AN OLD HOUSE REMODELED	174
	(Illustrated)
RESTING PLACES IN THE GARDEN	By Charles Downing Lay 177
	(Illustrated)
THE INDOORS AND OUT SERIES OF MODERATE-COST DWELLINGS.	
II. A Cottage for a Sloping Lot 60 x 100 Feet	By * * * Architects 183
	(Illustrated)
THE MISSION STYLE IN MODERN ARCHITECTURE.	
III. Details in the Mission Structures	By George Wharton James 186
	(Illustrated)
THE HOME GROUNDS	194
	(Illustrated)
FROM OUR OFFICE WINDOW	196





BOATHOUSE OF THE AMPERSAND GOLF CLUB, SARANAC LAKE, N. Y.

Indoors and Out

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VOL. IV

JULY, 1907

No. 4



An International Cricket Match at Manheim

Some American Cricket Clubhouses and Grounds

CENTERS OF ATHLETIC AND SOCIAL ACTIVITY IN REPRESENTATIVE SUBURBS

BY CHURCHILL WILLIAMS

OF all outdoor sports, cricket was one of the earliest to gain from amateurs in this country support sufficient for the establishment of permanent grounds and clubhouses. Of all outdoor games, cricket, almost alone, has continued to be free from the slightest taint of professionalism. As a game appealing distinctly to gentlemen, because of its honorable history, its traditions and the opportunity it affords for individual and scientific play, its following has almost wholly been drawn from those with the taste to select and enjoy whatever contributes to the rational pursuit of sport, and with the means to acquire and maintain the necessary

equipment. Consequently, among the very large number of outdoor clubs, which, with our wider and truer appreciation of what we owe to our physical being, have become a feature of American life, the cricket clubs are conspicuous; not by their number, for as a game, cricket has never, for obvious reasons, engaged popular attention as have at least several other games, but by the extent and beauty of their grounds, the harmonious lines and luxurious furnishing of their buildings and the quality of their membership. Indeed, few, if any, of the many country clubs are equipped as are a number of the cricket clubs, notably those in the vicinity of Phila-



MACDONALD BOWLING
HURDITCH KEEPING WICKET
WORM BATting





OPENING DAY AT MANHEIM, JUNE 28, 1890

delphia, which has always been a stronghold of the game.

It is a matter of fifty years since cricket in this country took the organized form of a club; it is over twenty-five years since the establishment of grounds and a house fixed the location of the Germantown Cricket Club, just within the corporate limits of Philadelphia, and to-day this is the largest and most completely provided of all these clubs. Together with the Merion Club, situated a few miles away on the high land overlooking the Schuylkill Valley; the Belmont

Club, which is just without the city proper, and the Philadelphia Cricket Club, which stands upon the hills of Wissahickon Creek, Manheim, as the Germantown Club is generally known, is well worthy of comparison with the most famous of the English cricket clubs.

But, while the word cricket remains a part of the incorporated name of each and all of the clubs mentioned, and as international matches almost every season with elevens from England, Ireland, Australia or

Canada testify, the game continues to be played with as much zest and success as ever, it is the other outdoor sports recognized officially by the cricket clubs which bring out the most members. Tennis is easily the most popular of all games, the rapidity of its growth in favor being sufficiently indicated by the fact that, within a year, Germantown has had to increase the number of its courts from twenty-five to fifty-seven. Golf, too, comes in for a large share of attention, as do bowls; and, at several of the clubs, football—the comparatively recently imported soccer—is played in



THE MAIN CLUBHOUSE AT MANHEIM

The Quarters of the Germantown Cricket Club

In this View the Second-story Veranda is shown Enclosed as a Winter Dining-Room

season. This being so, it is easily understood why Germantown has found its fifteen acres of field none too large, and why the fields of Belmont, Merion and Philadelphia, on every clear afternoon, especially in early summer or autumn, are thickly dotted with the figures of players.

Among these players are not a few women. The days when the cricket club was an organization solely for men have gone by. The associate membership, made up of women, is now an important part of the clubs, and the women, conspicuously in the cases of Germantown and Merion, enjoy special privileges. The ladies' clubhouse at Manheim is one of its chief attractions,—a rambling, white columned and trellised structure with porches all around it and long windows, which, from beneath giant trees, look out upon the cricket platform.

The main clubhouse at Germantown, of modified colonial architecture, is a solid structure of rough stone with white facings and shingled roof. It stands well back from the northern line of the high stone wall which almost entirely surrounds the grounds, except where pierced by wide gateways of wrought iron. The simple and dignified lines of the house, with a wide porch and a recessed gallery on the second floor, blend admirably with the flanking green of the big buttonballs and the parade of pointed poplars, and the structure is given the ample space needed for appreciation of its proportions by a broad field of clipped turf which stretches to the grand stand on the opposite side of the platform.

Behind the clubhouse the ground is terraced to the level of a large number of sunken tennis courts, while, upon its left, screening the stables, is an old-fashioned garden de-



THE LADIES' CLUBHOUSE AT MANHEIM
The Oldest Building on the Estate



COOLING OFF ON THE PIAZZA



THE COLONIAL INTERIOR OF THE LADIES' CLUBHOUSE
At Manheim,—with Tables set for Tea



Sundial and Tea House



A Shaded Seat



Parterres enclosed by Privet Hedges and Lombardy Poplars
 VIEWS OF THE FORMAL GARDENS, AN EMBELLISHMENT OF THE MANHEIM GROUNDS



The Pergola in Early Spring

1. 1. 1. R.



THE FIELD FRONT OF THE MERION CLUBHOUSE
At Haverford, Pennsylvania



THE MEN'S BUILDING AT THE MERION CRICKET CLUB



THE QUARTERS OF THE BELMONT CRICKET CLUB

finied by a hedge and box-bordered walks. From the front of the main house a broad brick pathway leads to the ladies' clubhouse and to the drive which winds to the principal entrance.

The ground floor of the main building is given over to wide hallways, smoking, reading, card and billiard rooms, a café for men and offices. In one of the wings are lockers and shower baths; in the basement a rathskeller, the kitchen and pantries. On the second floor are a large theater and dancing floor, and a dining-room, while the gallery (in winter enclosed with glass) is used for dining also. The decoration of the house is, for the most part, in flat tones, the big fireplaces being of brick and the furnishing of mahogany and leather.

In addition to this building and to the ladies' clubhouse, already alluded to, which carries out more strictly the Colonial idea in decoration and furnishing, Manheim has a separate building for the junior members and for the playing members, while a handsome three-story house is used as bachelor apartments. In the rear of the main clubhouse, and connected with it by an underground passage, is a very large structure of stone, with domed skylight, in which are a swimming pool, squash courts and bowling alleys.

Germantown is fortunate in its site, which was formerly that of a number of family mansions, from whose owners it has inherited many fine, old trees. Intelligent landscape gardening in the laying out of the grounds and in its sodding and drainage and in the placing of shrubbery have made the entire place restful to the eye as well as admirably fitted as a setting for its activities, of which heavy railings, sunk into the low, brick wall which traverses part of one side of the grounds, give occasional glimpses to the passers-by.

The present grounds have been occupied only since 1890, when, by a union with the Young American Cricket Club, Germantown's membership was largely augmented, and its former location, a mile or more away, relinquished. Nevertheless, the new field already has been the scene of some of the biggest and most stoutly fought international matches between elevens of visiting gentlemen cricketers and those of the club itself, or elevens representing all-Philadelphia, while a large number of the most prized of cricket trophies ornament the walls.

On the days of an international match, not even the out-of-door horse show presents a more lively scene. Cricket draws a fashionable crowd.



THE LADIES' BUILDING AT THE PHILADELPHIA CRICKET CLUB

On the big match days the grand stand and the benches along the walks are filled to their limits; the club porches are a blending of bright colors, the light gowns of the women and the blazers and flannels of the men are everywhere beneath the trees; while here and there, a four-in-hand or automobile is drawn up at some vantage point, and, perhaps, among the shrubbery glistens the white walls of a luncheon tent. The center of all is the dead level of the green cricket platform, with its widely scattered players.

This scene is typical of Merion as well as of Germantown, and, with some modifications, of the other clubs as well. In certain respects, indeed, the Merion grounds lend themselves even more readily to such an event. They are in the midst of a most beautiful country, are ample in size and excellently laid out. The main building at Merion, three stories in height, is of brick with tiled roof and faces a score or more of tennis courts, while still other courts —

THE LOCKER HOUSE, MAIN CLUBHOUSE AND GRANDSTAND
At the Philadelphia Cricket Club

THE LOUNGE AT THE PHILADELPHIA CRICKET CLUB



WATCHING AN INTERNATIONAL MATCH
At the Staten Island Cricket Club



THE LADIES' CLUBHOUSE AT STATEN ISLAND

BOSTON
PUP
LIBRARY

reserved for the women members—abut upon the end of the building. From the long, deep porch of the house one looks diagonally across the cricket platform, which lies directly in front of another building, used exclusively by the players.

The main clubhouse in the basement has bowling alleys, squash courts, shower baths and locker rooms; on the ground floor, a ladies' reception room, a common room, smoking, billiard and card rooms and a library. On the floor above are a large café, private dining-rooms, several bedrooms and a small theater and ball-room. The gallery (enclosed, as at Manheim, with glass in winter) is likewise used for dining. On the third floor are additional bedrooms for members. The interior decoration of the building is in flat tones, and the furnishing, for the most part, in weathered oak and leather.

Merion's cricket and tennis field, which is reached by a handsome approach and gateway, is supplemented by golf-links which have their own clubhouse, including a café. The club draws heavily for its membership upon the large number of wealthy families living along what is known as the Main Line (of the Pennsylvania Railroad), and in the winter season, as at Manheim, many dances and dinner-parties are given in its ballroom.

The Belmont and Philadelphia Cricket Clubs, while possessing somewhat less luxurious quarters, are adequately provided with house room for their immediate needs. The Belmont grounds cover about ten acres, and offer a cricket pitch, which, for many years, was ranked as one of the very finest in this country. On this crease, indeed, some of the most brilliant playing seen in international matches has taken place, notably in the game between the Australian eleven and the Gentlemen of Philadelphia, in 1896, when 525 runs were scored by the latter—a record to this day.

Belmont's main clubhouse stands just back of a sloping terrace and fronts the cricket field. It is of stone and brick for the first story, and for the second story, of frame, finished in dull gray, with buff trimmings. The club has recently greatly improved its property, and the broad lower porch and upper gallery of the clubhouse are inviting places from which to watch the play.

The interior of the house, too, has lately been

entirely refitted and refurnished, and now includes a café, lounging and billiard rooms, assembly hall and bowling alleys, as well as special rooms for the women members. At one side of the cricket field is another building of stone and timber, three stories in height, which holds lockers, shower baths and whatever is needed by the players.

The Philadelphia Cricket Club, while as old a foundation as is the Germantown Club, until comparatively recently occupied quite modest quarters. To-day it has an admirable clubhouse and a remarkably beautiful terraced field. Its by-laws recognize three games only—cricket, golf and tennis; and, perhaps, it is by its activity in this last game rather than in the first two games that it is most widely known. For all that its rolls carry the names of many players famous in America's cricketing history. On its grounds are held the annual national tennis championships for women; and not even cricket, though it brings together a large number of people, is the occasion for a more brilliant gathering.

Outside of Philadelphia, perhaps the best known and most active of the cricket clubs is the Staten Island Club, founded in 1871, and now located at Livingston, Staten Island, where it occupies five acres of ground, on which, besides cricket, are played baseball, tennis and association football. It possesses two buildings, the main clubhouse and a ladies' clubhouse, both of frame, and has a membership of about three hundred. On its grounds have been brought off nearly all of the international cricket matches played in the vicinity of New York for the past twenty years, among them those with the elevens of Lord Hawke, in 1891 and 1894; with Cambridge and Oxford, in 1895, and Prince Ranji, in 1899.

Baltimore also has a cricket club which, though perhaps less widely known than the Staten Island Club, has a membership of twenty-five hundred, including both men and women, and occupies grounds some four acres in extent at Roland Park. The club, which was founded in 1876, was in 1903 merged with the Baltimore Country Club, by which name it is now known. It occupies two pretty shingled buildings and makes especial provision for tennis,

Our Mountain Cottage

DESCRIBED BY THE ONE WHO DESIGNED IT AND HAS LIVED IN IT

OUR cottage in the Pennsylvania mountains is on the exact site of the old fishing and shooting lodge built by our forbears some thirty years ago, when Eagle's Mere was still "Lewis's Lake," when the cry of the wild cat could be heard at night in the surrounding forest, and when the deer came down to drink at the margin of the water. These are now things of the memory, for Eagle's Mere is to-day a prosperous summer resort with costly cottages and crowded hotels. The lake swarms with rowboats and canoes, while an abominable little steamboat churns through the placid waters with disgusting regularity. Despite these drawbacks, the dark-fronded hemlocks still overhang the rippling waters of the lake; the deer are still occasionally seen in the surrounding forests and the knowing angler may still lure the speckled beauties from the foamy pools of leaping streams.

Many summers spent in the old lodge gave us a clear idea of our needs in the new cottage. It must be roomy and well lighted, absolutely simple within and without. It must have the expansive quality which would permit of the sudden descent

of a house party of young folks without causing undue inconvenience. The old house had two great second-story rooms—bearing the cheerful titles of the "men's ward" and the "women's ward." They were fine, airy apartments for one or two people; but when necessity arose, cot beds were quickly erected, and twenty-five or more young souls could sleep in peace beneath that protecting roof-tree and rise to greet the day with cheerful songs and laughter. Therefore in the



"THE ENTIRE HOUSE IS WOOD-LINED"



"WE MUST HAVE A LARGE LIVING-ROOM"

new cottage we provided one large second-story bedroom, while in the attic a dozen or more boys can easily be stowed away if occasion requires. We must have a large living-room and opening from it must be a bedroom. The advantage of this is self-evident when an aged or invalid visitor arrives and can pass with a few steps from bed to fireside, with no stair to climb.

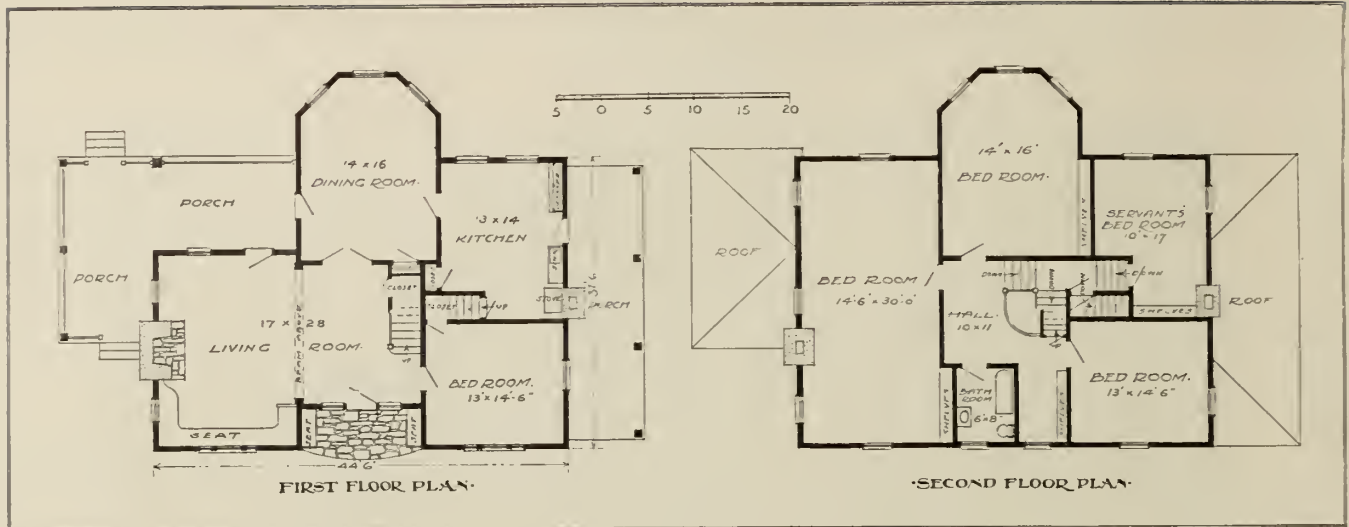
The entire house is wood-lined, for we must be able to drive a nail where impulse dictates; we will



"WE PREFERRED THAT THE HOUSE SHOULD HUDDLE SHYLY AMONG THE TREES



RATHER THAN WAVE CONSPICUOUS ARCHITECTURAL GRACES TO THE DISTANT HIGHROAD"



have no crumbling plaster and no wall paper problem. The Eagle's Mere region produces a beautiful hemlock board four inches wide. With this we lined the walls and built the partitions. The whole interior was given a coat of pale gray-green stain to which the grain of the wood imparts a slightly golden hue in the high lights. The joists are left rough and exposed. The stain upon their coarser fiber becomes several shades darker than the smoothly surfaced walls and gives them just the proper emphasis. The rough, warm-hued stones of the living-room fireplace make a charming color harmony with the surrounding woodwork.

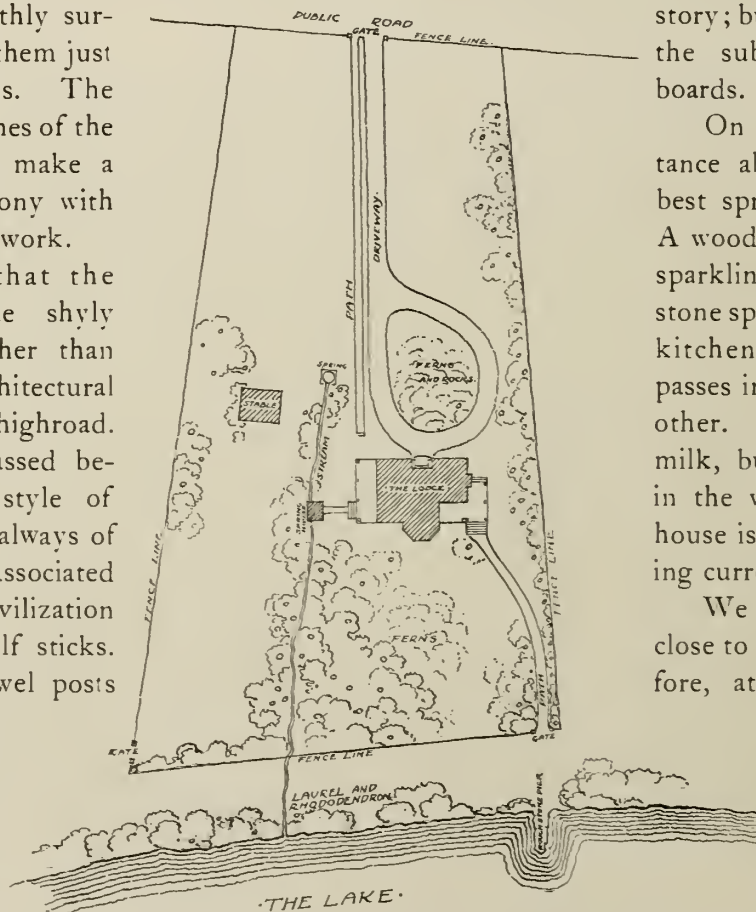
We preferred that the house should huddle shyly among the trees rather than wave conspicuous architectural graces to the distant highroad. Eagle's Mere has passed beyond the log-cabin style of architecture, which is always of doubtful taste when associated with such signs of civilization as bathrooms and golf sticks. Porch posts and newel posts with the bark on do not fill us with the unfeigned joy which they seem to beget in the hearts of many. The transplanted Swiss chalet, with

stones neatly arranged on a roof peeping from among the shade of Pennsylvania sugar maples, does not appeal to our sense of fitness. We just wanted a house simple in line and quiet in color. Moldings must be few and plain because they cost money and need paint; porches must be spacious and well distributed; we must catch the right views from the right windows. Our original drawings showed stone for the first

story; but economy necessitated the substitution of weather boards.

On the slope a short distance above the house is the best spring in Eagle's Mere. A wooden trough conducts its sparkling waters to the little stone spring house opposite the kitchen door. The stream passes in one side and out the other. The vessels containing milk, butter, etc., set directly in the water, while the whole house is kept cool by the passing current.

We have sought to live close to nature and have, therefore, attempted no feats of landscape gardening. We encourage the natural growth of the ferns and add to their numbers by transplanting from the surrounding forest. Be-



THE PLAN OF THE LAKESIDE PROPERTY

tween us and the lake are bowers of laurel and rhododendron, which we carefully cherish. At times, a little chopping must be done to preserve our favorite views; especially the glimpses of the lake. The house is shaded on three sides by full-grown birches and maples. No cottage in Eagle's Mere is so close to the lake shore, and the privilege of taking that delicious plunge off the rocks before breakfast is a priceless thing to some of us.

With the lake on the front, the highroad to the rear and a sufficient plot of ground to make

the close encroachments of objectional features impossible, we can live the rather secluded, rustic life which we crave in summer, yet be close enough to our pleasant neighbors for social intercourse when so desired. It is not camp life (which we dearly love), but it is far removed from the high tension existence of the ordinary summer resort. We think we have well-nigh solved the problem of summer life for a good sized family of moderate means. Incidentally, our little house cost just about three thousand dollars.

GEORGE SPENCER MORRIS.

Bungalows beside Fresh Water Streams

BY GUILFORD BLAKE

ORIGINAL SUGGESTIONS FOR INEXPENSIVE HOLIDAY ABODES

DESIGNED BY STANLEY T. J. MOBBS

WATER to drink, water to wash the dishes and pans, water to bathe in, to fish in and boat upon! Is not this nearly the first desideratum in selecting a site for an unconventional summer abode? The joys of that dwelling spring from the kinship with Nature, and it is wise to have all of Nature's elements at hand, to make new uses of them in the daily sport and in the housekeeping, however primitive that housekeeping may be.

If a streamside be chosen for the bungalow, a pure spring is likely to be found not far distant, and it is an easy matter to pipe the water to one of the rooms. The holiday will be varied, the caring for creature comforts simplified. A daily programme will never be wanting, for there are meadows to traverse, woods to penetrate, a miniature Mississippi and its tributaries to explore. One can be a Stanley or a La Salle.

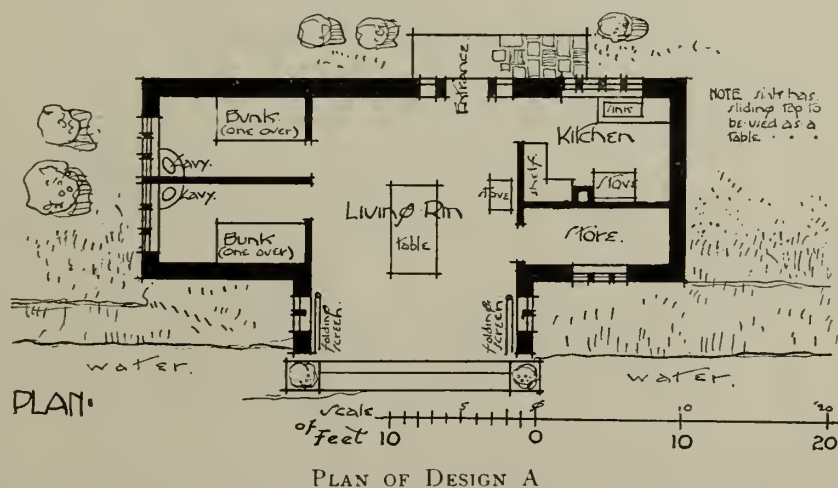
Think of the joys of fishing, sailing and canoeing, the amusement of tub-races, the rivalry kindled by a match of skill at swimming. A whole day may be given to an outdoor tournament

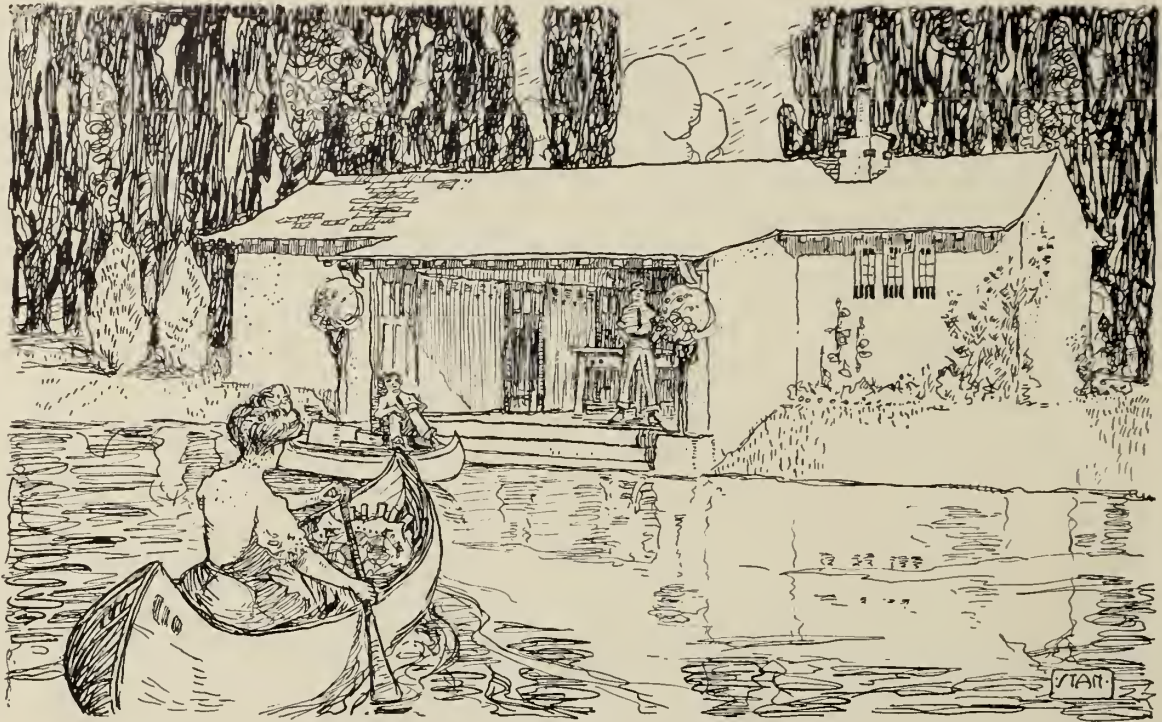
with an amphibious programme. The mechanically-minded may take to sailing model boats or contriving a water-wheel. Or, if one holds aloof from the common sports, and, like Dr. Johnson, "contrives wonderfully well to be idle without them," there is near by

The shady nook for him and his book.

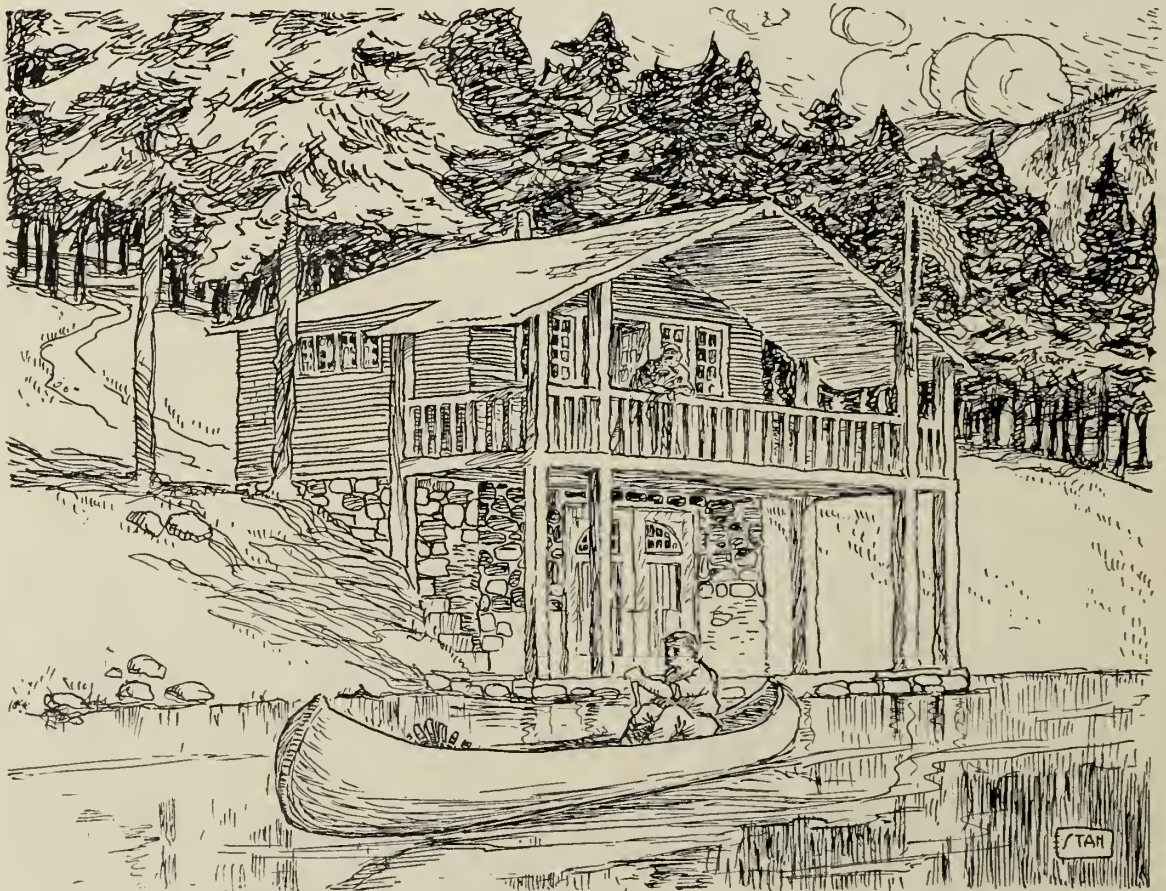
The veranda is a vantage point for watching the sports of the others. If those who lounge there after sunset fear mosquitoes, a portion of it can be readily enclosed by means of a wire screen. The pests will not be feared by the more active members of the bungalow family; and they will scarcely be noticed at all if the water-course is free from still, sedgy places or stagnant byways, and if there are no marshes near.

One never really rusticates while sleeping in a bedstead. The hammock, the traditional cradle of the ship-boy, offers comfort to any man or woman. A folding canvas cot is nearly as portable. With a sheet wrapped around the body, a wicker couch is the coolest sleeping place. Under most condi-

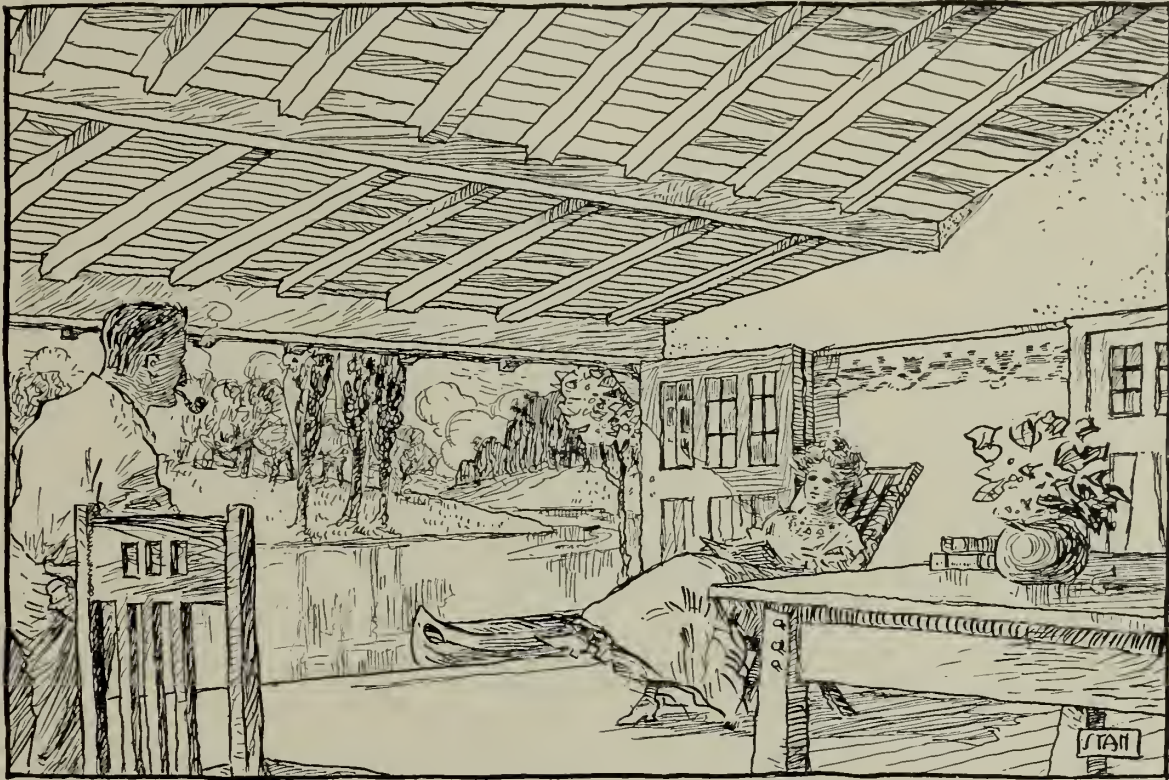




DESIGN A. A BUNGALOW AT THE RIVER'S TURN



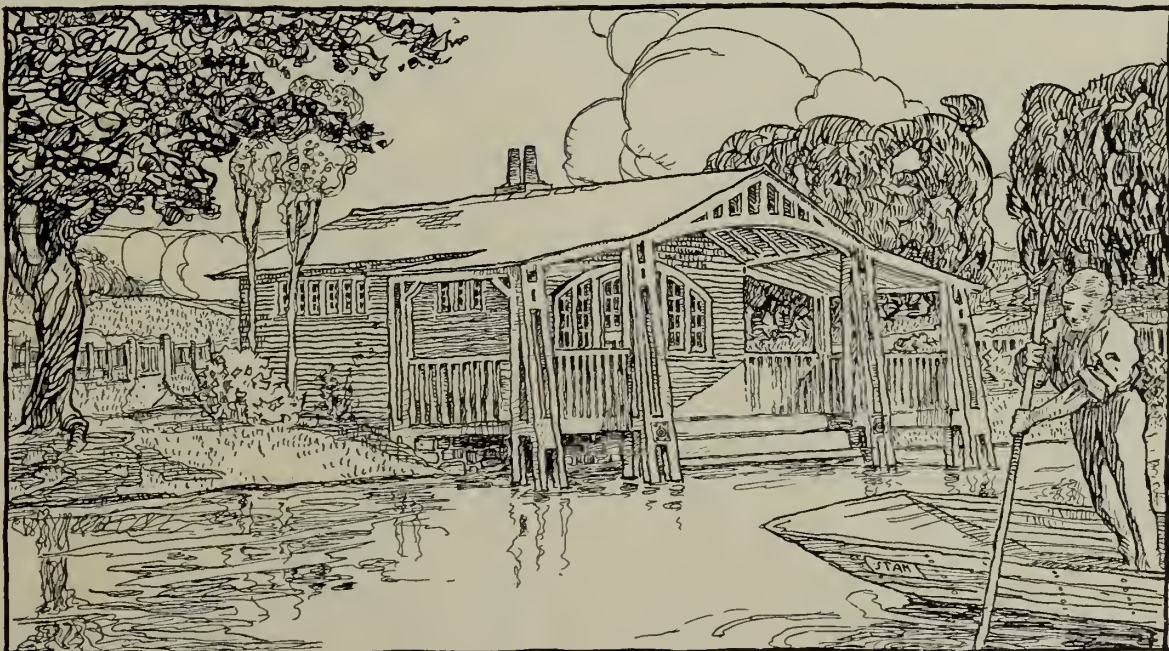
DESIGN B. A BUNGALOW AND BOATHOUSE COMBINED



DESIGN A. A BUNGALOW AT THE RIVER'S TURN

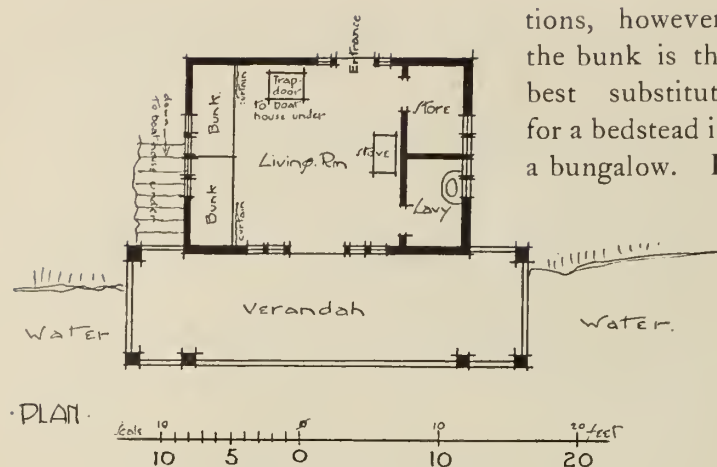
A View from the Living-Room

*Showing the Folding Doors laid back against the Wall. They can be closed in Rough Weather
Walls Plastered and Decorated with Stencil Pattern*



DESIGN C. A BUNGALOW WITH VERANDA OVER THE STREAM

*With Living-Room, Two Sleeping Cabins, Kitchen and Storeroom
(See plan)*



PLAN OF DESIGN B

is built-in, as upon vessels, and is most comfortable if provided with a wire mattress. (In lieu of this are rigid wooden slabs at a modern educational camp I know of, inhabited by a hundred boys.) If the bunk be adopted, the plan of the bungalow is greatly simplified and its cost correspondingly lessened. The bedroom becomes what it properly should be—a sleeping place only; a room or alcove 8 feet square will accommodate two single bunks, one above the other. Their length should be 6 feet 3 inches, and this leaves space at the end for a clothes cupboard, if desired, 21 inches wide. Steamer trunks can be placed under the bunks, as in voyaging, for bungalow living is but to voyage away from the routine of the rest of the year.

The kitchen is a place that might better be termed in the bungalow, the "galley." It is only for preparing food, and need contain nothing but an oil stove, a sink and shelves or a cupboard for dishes. The ambition of the bungalow host should be to simplify this department to the last degree; and appreciative guests will not be lacking to whom he can show with pride the record result he attains. There is many a comfortable bungalow family that have not the luxury of a separate

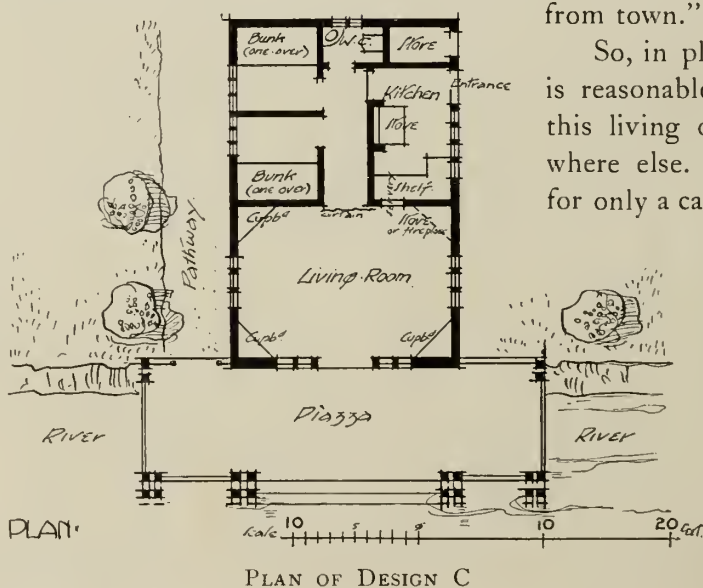
tions, however, the bunk is the best substitute for a bedstead in a bungalow. It

room for the kitchen, and they have found it practicable, if the family be small, to prepare the meals in the living or common room.

A small cupboard for stores is needed in the bungalow, but a refrigerator is unnecessary. A barrel, sunk two-thirds of its depth in the stream and covered with a close-fitting lid, to which gunny sacks, matting or old carpet has been tacked, will keep cool the daily food. If an indoor toilet is considered necessary, it should drain into a tight well of concrete located inland, at least fifty yards down stream. Kitchen waste may be thrown out on the surface of the ground at some obscure place. Under most conditions the ground will quickly absorb it.

Of all rooms, the most important in the bungalow, in fact, the very center and heart of it, where its social life is enthroned, is the living-room. It occupies middle ground between vehement outdoor sport on the one hand and the prosaic occupations of cooking and sleeping on the other. It is the evening room, the rainy-day room, the council and entertainment room, the overflow room, where in emergency, a party of guests, far in excess of the "authorized capacity," of the bungalow can be accommodated. "The delight of our bungalow," says my friend, "is that it has no authorized capacity. Like the street-car, there is always room for one more; but there are no dangling straps, no jolting stops, sharp curves nor irritable occupants. Our living-room serves us in manifold ways. It rises to the occasion and hospitably takes in, no matter how large and unexpected, the party that comes from town."

So, in planning the bungalow, it is reasonable to lavish space upon this living or common room, if nowhere else. A space 10 x 10 feet is for only a cabin housing two or three men; but a room 14 x 18 answers for a family bungalow. The room must have many openings, inviting the breeze from all quarters and having for its own interior decoration, scenes of the out-of-doors, framed by the broad



PLAN OF DESIGN C

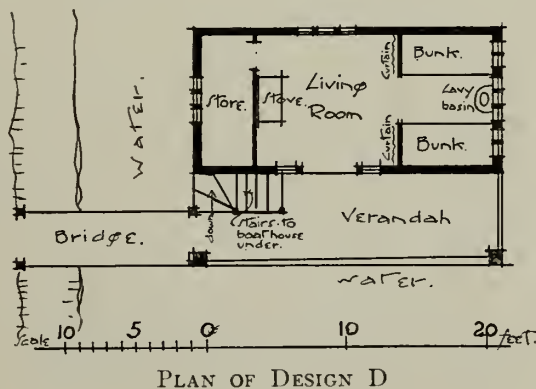


DESIGN D. A BACHELOR'S SHACK

apertures in the walls. If the room must contain the sleeping bunks or cooking apparatus, these can be shut off at appropriate times by movable screens or heavy curtains of coarse and serviceable material.

In the living-room alone can the artist at furnishing have scope, nor can her skillful touches be elsewhere so easily perceived. The color of the hangings, the shape of door and window dressings, the design of the rugs, of the furniture selected, skill at using flowers and boughs for ornamentation are signs by which the taste of the owner may be instantly felt and judged. In one bungalow I have seen, all of the living-room furniture had been made by the owner. The burnt decoration of the wooden walls he had also designed, and with the help of his wife had executed it in the evenings, during the first ten days of their occupancy.

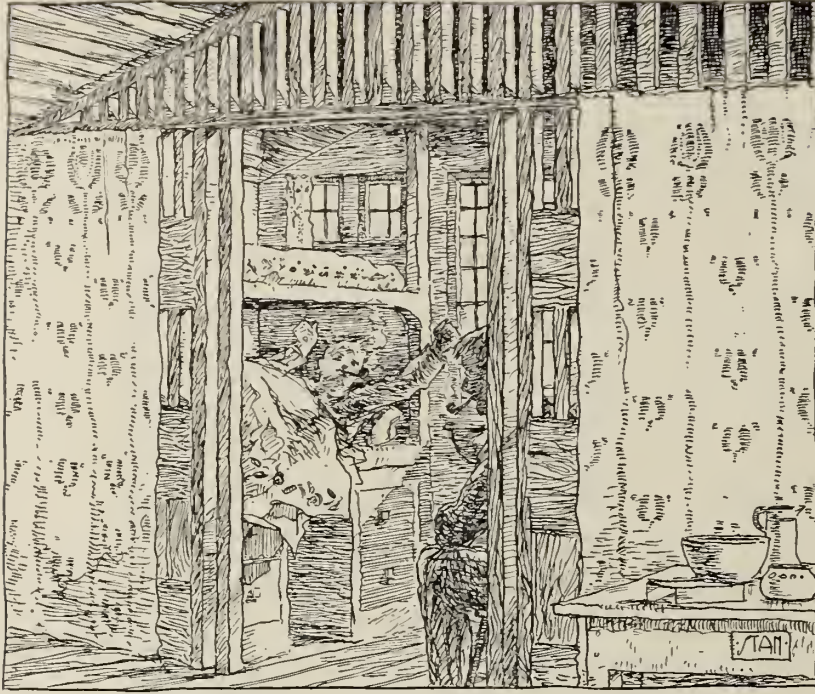
"A Bungalow at the River's Turn" might almost be called "a day and night summer-



house," one entire side of the living-room being open to the stream. It is intended to be built of brick covered with plaster roughcast. The roof is to be of shingles, stained red, or of tiles. Part of the storeroom could be walled off for a toilet if desired. The interior walls are all to be plastered, tinted a flat coat

up to the door heads and decorated by a water-lily or other appropriate stencil pattern. The structure as designed, contains about 8,500 cubic feet, which at 11 cents would make the cost of the building \$935.

"A Bungalow and Boathouse Combined" illustrates the feasibility of having a bungalow upon a boathouse solidly built of fieldstone. The living quarters are thus insured of perfect dryness. In this design it will be noticed that the living-room answers also for sleeping and cooking. The walls are to be of frame, weather-boarded and painted a dark brown; the shingle roof is to be a very dark green and the window frames and balustrades, a pale green. The design figures at 11,500 cubic feet, which would bring the cost to about \$1,000.



THE SLEEPING BUNKS OF A BACHELOR'S SHACK

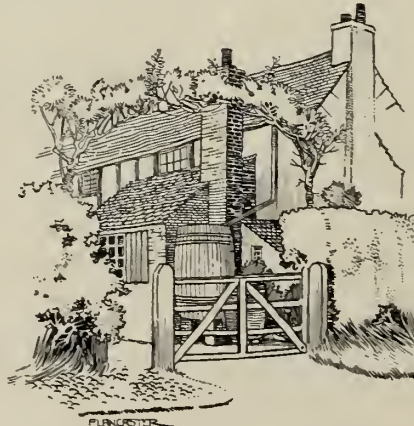
"A Bungalow with Veranda over the Stream" contains the most complete appointments of any illustrated: a living-room, the cupboards of which make it an octagonal shape, two sleeping cabins, each accommodating at least two persons, a kitchen with a "pass" for serving food directly into the living-room, a storeroom and a toilet. It is to be built entirely of wood, the weather-boarded walls painted white, the roof red and the window frames pale green. The design contains 10,500 cubic feet. Estimating this at 9 cents per foot brings the total to \$945.

"A Bachelor's Shack," as the designer terms it, is altogether an aquatic habitation and is devoted equally to housing the boats and the aforesaid bachelors. The bunks for sleeping are separated from the living-room by an open screen, over which curtains are drawn. A wash bowl between the bunks, a living-room with

cooking stove and a large storeroom, complete the accommodation. The wood walls are intended to be painted green with white trimmings. A cubic contents of 7,700 feet would make the cost of the structure come to about \$615.

From these suggestions it may be learned how easily a man may provide for himself and his family a holiday home which shall offer more than the usual occupations of dry land. And in winter how much cheer and comfort they would hold for skating parties. How much territory still borders on rivers as yet unknown, and which may provide the bungalow site. How many owners of riverside estates have it in their power to provide,

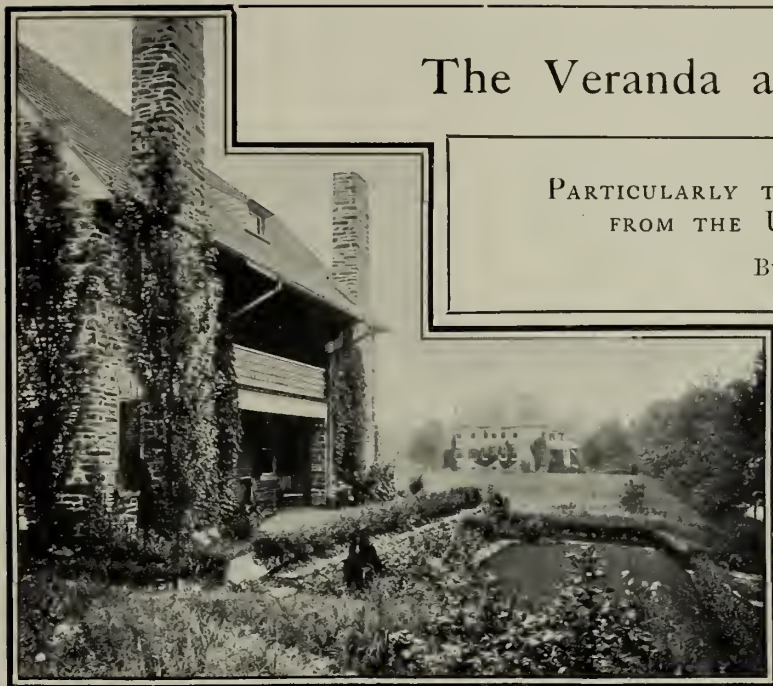
by means of a bungalow, for the summer holiday of children or grandchildren. How many such owners have more land than they need and are willing to lop off a short stretch of shore for the use of another. We Americans cannot consider that we have embraced outdoor life until we have utilized our rivers and utilized them to the fullest. By means of the beautiful abode on their shores, not only is the contemplative temperament entertained with natural beauty, but there is scope for the strenuous and athletic nature as well. Indoor comforts can be lessened, the bungalow increased or diminished in size, lightened in construction or made more solid, correspondingly lowering or raising the cost. Bereft of every ornament and luxury, it would still minister to man's amphibious instincts which slumber within him, though he knows it not.



The Veranda as a Habitable Place

PARTICULARLY THE UPSTAIRS VERANDA, ACCESSIBLE
FROM THE UPPER ROOMS OF THE HOUSE

BY BERTHA M. HOWLAND



EVEN the sensitive and all-discerning Stevenson, who, more than almost anyone else, was the apostle of the joy of life in the open, was once, in his early days, surprised into saying that he had made what seemed to him almost a discovery, — “that the outer world, from which we cower into our houses, seemed, after all, a habitable place.”

By many fortunate persons since then this same delightful discovery has been made, and in these happy days of the cult of fresh air, few of us “cower into our houses” as much as did our immediate ancestors. But many of us, who, by necessity, “are in city pent,” (and perhaps we might add in *suburb pent* also) are not free to take “An Inland Voyage” or “Travels with a Donkey.” And we are still novices in the art of enjoying the “outer world as a habitable place.” The problem of how best to secure such enjoyment and all its emancipations still confronts us in many forms.

It seems to me that no happier solution of the problem is to be found for the city prisoner than that of the

second story veranda, or we might call it the “upstairs veranda,” and so not limit its level. Naturally the dwellers in warmer climates than ours were the first to discover the delights of such open-air rooms as roof gardens and loggias, and the most familiar classic model for the present-day veranda is the Italian loggia and that, more often than not, is found upon the upper levels of the house.

For the average modern house this retreat, if it is to serve as the gathering place of a family and their resort for the drinking of afternoon tea, is more practicable if built on the level of the second floor. And here, if the veranda be large enough, one may almost live a complete cycle of life, reading or sewing, sleeping, eating and talking, at peace with one’s friends, far removed from the bustle and dust of the highway and the intrusive gaze of the curious or unduly interested passer-by.



FIG. 1. SECOND-STORY VERANDA WITH DECORATED CEILING
At the Villa Medicea, Italy



FIG. 2. VERANDAS IN THE FORM OF A HUGE SEMICIRCLE

And for the practical minded it is an excellent place in winter, when the ground is bad, for the thrifty housewife to have her rugs beaten and shaken.

The ideal veranda should be at least from 9 to 12 feet wide and 20 to 25 feet long. Here there will be room for one or two good-sized tables, several chairs, including a steamer chair, and at least one hammock. All these furnishings, as well as the rug upon the floor, should be chosen with a view, not only to comfort, but to their reliable wearing qualities when exposed to the weather.

For furniture it would be advisable to use, rattan, willow, rustic hickory, or the Mission style of furniture, if finished with a waterproof stain. Both tables and chairs can be bought in these materials. For floor coverings, the Moonge rugs, the English braided reed rugs, or Japanese straw rugs are most artistic and satisfactory.

If one roughly figures the cost of furnishing

a veranda in this fashion it will be somewhat as follows:— a Japanese straw rug will cost, according to the size, from \$3.00 for one 3 feet by 6 feet, to \$18.00 for one 9 feet by 12 feet; a willow armchair with any color stain, from \$6.75 to quite twice that amount; one without arms much less; a rustic hickory armchair, \$2.25, or a rocker, \$5.75; a table of the same sort, \$5.00. And the Mission furniture will cost approximately the same. A steamer chair will cost between \$2.50 and \$3.50. Hammocks, of course, come at any price, from the ordinary hammock at \$2.50 to the mattress hammock, which may cost from \$12.00 to \$14.00. Thus, with one large rug, two armchairs, a rocker or a steamer chair, two tables and a mattress hammock, these furnishings would cost about \$60.00.

For the coverings of veranda cushions, the most durable and washable material is natural colored linen, and a few of these used with cushions covered with Madagascar strips or Madagascar



FIG. 3. AN UPSTAIRS VERANDA BEAUTIFIED WITH FLOWERS

cloth are very effective. The Madagascar cloth is fifty inches wide and costs eighty-five cents a yard. Japanese drop screens are, in many cases, another essential part of veranda furnishings. These cost, according to size, and fitted with metal pulleys, from \$1.75 to \$4.75. The original wooden pulleys that are imported with them are perfectly useless and should always be replaced by metal ones.

As suggested above, the classic model for this sort of outdoor living-room is the Italian loggia. To the Italian this place was of such importance that it often received some of the most artistic and costly decoration of the whole house, as may be seen in the painted ceiling of the Villa Medicea (Fig. 1), at the Vatican, and in many places throughout Italy.

But in our severer climate such elaborately painted decorations would not, of course, be durable, and hence are out of the question. There can be, however, many delightful and simple

schemes of decoration for the ceilings of verandas, if carried out by means of beams or well considered sheathing and paneling in rectangular or diagonal patterns, but always simple, and structural in character. Intricate ornament is not necessarily more beautiful in such a place.

Similarly too, the artistic imagination of the architect has an unlimited scope in the arrangement of the supports of this roof and the proportions and spacing of the openings. The supports may be of smooth rounded pillars, as shown in Figure 3, although in this instance the whole construction seems unnecessarily massive and almost oppressive. The open spaces, as will be seen, are too small in proportion to the heavy roof and pillars. Otherwise this must be a delightfully retired Teufelsdröckh sort of retreat, from which one may look down upon the world and philosophize. Figure 4 shows a square wooden pillar support, fluted with good effect; Figure 5, some masonry supports wonderfully well done and har-

monious; and Figure 9, shingled supports to match the house. In this last cut please note the slight but very charming curve at the base of these supports, which coincides in feeling with the more flexible curve of the roof, giving a sense of lightness and airiness to the whole house.

And there is the same opportunity for the play of fancy in the design of the balustrades and rails, as will be seen by comparison of these various houses, but where it is possible, it is most desirable that the top surface of this balustrade should be from five to ten inches wide, for the reason that boxes and pots of



FIG. 4. A VERANDA UPON A KITCHEN L

plants can be safely set thereon.

Thus there is every chance of making this open-air apartment possess the most attractive frame work of any room in the house. Then with vines for a wall covering, the trees and sky for pictures, combined with the tonic of the air and the music of birds, what can be more desirable as a living-room?

All the foregoing plans, however, for the construction of the upper veranda are very sketchy suggestions that can be most easily applied in the primary construction of a house. But let us consider how those who hire or inherit houses, where no such



FIG. 5. FOURTH-STORY VERANDAS TO A PAIR OF HOUSES



FIG. 6. A VERANDA ADDED TO AN OLD HOUSE

provision was made, can best compensate themselves for the fatal lack.

There are few houses, in the suburbs at least, and comparatively few in the city, that have not some sort of a first floor projection that has a roof,—and that roof is always, in its turn, a possible floor for something that shall be put above it. This projection may be in the form of a huge semi-circle, as in Figure 2, or a small porch (Figs. 6 and 8), or a sloping roof (Fig. 7), or a large, flat piazza roof (Fig. 11). It may be in the form of a bay window or a kitchen L, or any other extra room. Large or small, they all have possibilities, and by means of a simple wood flooring may become the beginnings of the most delightful out-of-door retreat imaginable. One of the most successful second-story verandas I ever saw was constructed by a boy of fifteen on the roof of the kitchen L, fenced about by nasturtiums and other gay colored flowering plants, and there, lying on a bank of cushions and pillows, he used to



FIG. 7. SMALL VERANDA WITH PROVISION FOR FLOWERS

read by the hour surrounded by beautiful things, and absolutely undisturbed.

If such a piazza or roof, by natural inheritance, happens to have a railing, the task of constructing a screened veranda is easy (Fig. 12). The lightest, least conspicuous and most effective form of screen may be made of gas pipe and chicken wire,—the gas pipe being attached by iron sockets to the outside of the veranda railing



FIG. 8. AN UPSTAIRS VERANDA ROOFED BY MEANS OF IRON RODS AND CANVAS



FIG. 9. AN UPSTAIRS VERANDA WITH SHINGLED SUPPORTS

and arranged to form a framework to which the chicken wire is fastened. Long, narrow wooden boxes may now be placed upon the broad railing around the veranda, in which should be planted rapid growing vines, such as nasturtiums, morning-glories, rambler roses, etc. Even the much despised wild cucumber vine, the torment of gardeners, may find here its true and appropriate function. Where there is not room to set such boxes, as would be the case on the narrow railing shown in Figure 6, the boxes might be hung from the rail by strong, flat iron hooks, securely fastened to the box.

Even the timid soul that cringes at the thought of near-by insects must find an added grace and beauty and a sense of seclusion given by the screen of plants in the

balcony of the house in Figure 7, when compared with the painful and almost blatant barrenness of that in Figure 6.

In houses of fairly permanent ownership, if there be plenty of surrounding land, one need not, of course, be limited to the plant box for the soil in which to plant one's vines. Strong perennials may be started in the ground and the old-time bittersweet, clematis, passion flower, woodbine and other well-known vines, may be grown for a screen and shelter. The grapevine ought to find a place here, too.

For the roofing of the temporary upper veranda, sailcloth or adjustable awnings may be used, or one's structure of gas pipe may be carried across with a pergola effect, so that when the vines are grown, the roof will be of green leaves.

It is a good idea to arrange the upstairs veranda so that only half of it is covered. It then provides shade or sun, as may be desired, according to the weather and the season.

Such large roof spaces as are shown over the wings of the house in Figure 11 and the porte-cochère in Figure 12, are golden opportunities for such verandas with a half roofing. They are, in fact, ideal. The floor spaces are large, the balustrades have strong supports and a broad rail, and a house owner could not wish for a better foundation upon which to con-



FIG. 10. A SUNKEN BALCONY SUITABLE FOR SLEEPING OUTDOORS

struct a delightful outdoor living-room.

In our present generation, one not only sits out-of-doors at all seasons by day, but, either from choice, or because of the necessities of ill health, often wishes to sleep out-of-doors at night. To such a person, the upstairs veranda is an incomparable blessing.

A sort of cage may be made at one corner with wire screening, entered by a screen door, that will keep off the mosquitoes in summer, and a more substantial screen, put up on the weather side in winter, will keep off the more bitter blasts. Both these screens can be constructed with very little expense on a covered veranda, or, in the case of the sunken balcony in Figure 10, no further protection from the wind would be necessary. And if one happens to be a user of one of the sliding beds so freely advertised in magazines at the present day, which can be half projected through an open window, so that one sleeps with one's head out-of-doors and one's feet in the room, it seems less suicidal (considering that one must always feel one's self in imminent danger of being guillotined somewhere between one's chin and heels, by an accidentally falling sash)—it seems less suicidal to feel that one's head is projected over a veranda, however small, instead of a pavement twenty feet below!

Night on the veranda is by no means the least enjoyable period for these open-air experi-



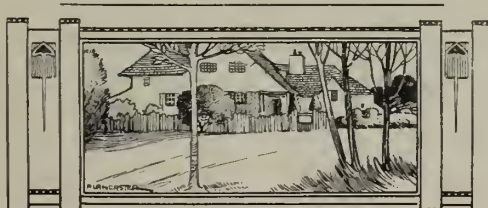
FIG. 11. ROOFS GIVING OPPORTUNITY FOR UPSTAIRS VERANDAS



FIG. 12. PORCHES WHICH MAY EASILY BE PROVIDED WITH A SECOND ROOF

ences. Again, it is Stevenson who has given to the sensations of the out-of-door sleeper the best expression: "Night is a dead, monotonous period under a roof; but in the open world it passes lightly, with its stars and dews and perfumes, and the hours are marked by changes in the face of Nature. What seems a kind of temporal death to people choked between walls and curtains is only a light and living slumber to the man who sleeps afield."

Though the experience may sound less poetic, the sensation is only slightly less true to the man who sleeps on the upstairs veranda.



An Old House Remodeled

BY MEANS OF WELL CONSIDERED ALTERATIONS AND ADDITIONS A DWELLING BUILT IN 1801
IS MADE TO SERVE AS AN ATTRACTIVE HOUSE TO-DAY



NOTHING VERY BAD, NOTHING VERY GOOD ABOUT THE OLD EXTERIOR

WHETHER or not it is worth while to remodel an old house for the living needs of the present is a greatly discussed question. The age, condition and location, of course, are large factors, and the selection of a house having some points of real interest, either inside or out, is necessary to success. In so far as age is con-

itself to assist the remodeler. The picture showing it before alteration was taken under conditions hardly fair for purposes of comparison from a "before and after" point of view; but it serves to emphasize the amount of the owner's faith in its possibilities.

Two good fireplaces, with simple mantels, some old-fashioned wide board wainscots and a severely plain staircase with small landings were all there was of interest inside. But the rear presented an open view of brook, shrubbery, mill-pond and distant hills, while around the house, but not too near, were beautiful elms and a fine white oak.

The builder of the house in 1801 either cared nothing for landscapes or was too busy to notice them, so that two small windows only gave an outlook from the most attractive side. The first thing desired was a better acquaintance with this landscape by means of many more openings in the rear wall.



THE INTERIOR OF THE OLD HOUSE HAD LITTLE IN ITSELF TO ASSIST THE REMODELER

Such an invention as a central heating plant was something not dreamed of in the truly old cellars, so that extra excavation and foundation work is generally found necessary. This house was no exception, and the basement had to be doubled in size.

Dormer windows on front and rear were imperative to make the attic rooms comfortable for summer. The porch adds a touch of dignity and hospitality, while the plant bay in the sunny corner of the dining-room gives a pleasing touch of color to the interior as well as the exterior. Too much cannot be said of the improvement made by reverting to the original design of small-paned sashes which had recently been replaced by the hideous two-light factory type.

To enjoy still more the prospect from the rear, an ample piazza opens from the library and serves as a gallery to overlook the tennis court and garden. The painting of the outside is white, with blinds and doors of the Paris shade of green. The window shades are of forest green.

In the staircase hall a landscape tapestry paper in dark and light green tones is used; for the dining-room a tapestry paper of dark greens, yellows and browns with pine cone and needle design above a white dado; for living-room a dull red Eltonberry above a white dado forms a soft background for gold frames and plaster casts, and harmonizes with the mahogany furniture and Khiva rug. Green rep of a tone similar to the window shades is used for the furniture covering and window seat.

The library in the rear is



THE EXTERIOR AFTER THE ALTERATIONS

largely an addition to the house and is treated in the modern manner with bookshelves, built-in window seat, desk and wall paneling of dark brown stain relieved and brightened with a strong yellow Eltonberry paper above. Quiet green paper and dark brown stain is used in the sewing-room and buff painted walls with the natural finished North Carolina pine in the kitchen.

The bedroom shown was unchanged but for



THE NEW LIVING-ROOM

Showing Old Mantel and how the Closet on the Left was removed and a Window and Seat added

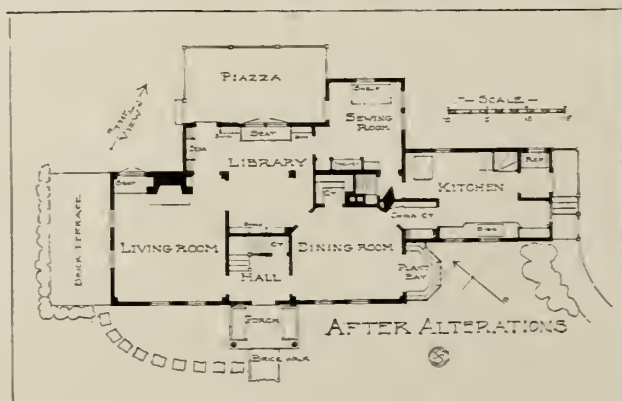
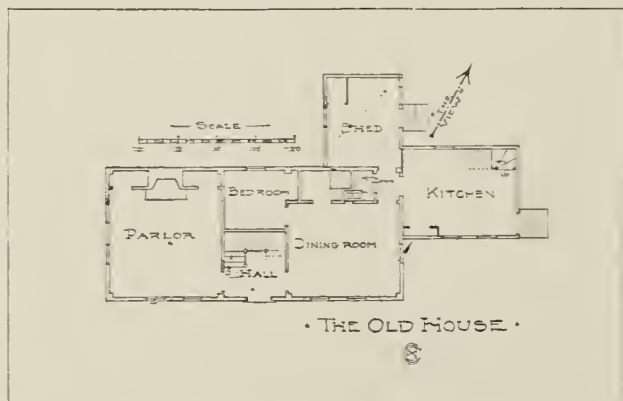


THE NEW PORCH
With Settles and Brick Floor with Concrete Border

paper, paint and furnishings. Warm green paper in texture effect with green and pink ribbon border is used here. A small molding runs around at level of window stools and



The Hall



THE PLANS BEFORE AND AFTER THE ALTERATIONS



THE BEDROOM REPAPERED AND REFURNISHED

mantel shelf and the plaster is painted white below that line.

The remaining rooms are papered with small pattern and striped papers with white painted finish throughout.

In many ways the house has a charm which a new house lacks; and from a financial point of view the expense is not so great as would have been the case of a newly built house of similar area. And there is a satisfaction to be felt in having preserved a fine old landmark. The architect who remodeled the house was Mr. Howland S. Chandler of Boston, who is also the owner.

Resting Places in the Garden

SEATS OF FORMAL AND INFORMAL DESIGN ORNAMENTING THE HOME GROUNDS

BY CHARLES DOWNING LAY

THE furnishing of a formal garden demands more taste than the furnishing of a house, because in a garden there are but few things which can be used, and these must be perfect. In a house there are so many things that they are apt to be judged as a mass and not individually, as they must be judged in a garden.

Of the possible furnishings for a garden (plants are not to be considered furnishings), seats are, perhaps, the most important; their double appeal to tired bodies and languid dispositions is most powerful, and they may also have an æsthetic value quite apart from their inherent beauties in marking axes, ending walks and giving snap and vigor to a formal scheme; hence, the placing of a seat in a garden is more to be considered than the seat itself, but the chances of wrong placing are much less where the positions are fixed by the formality of the garden than they are in a picturesque scheme, where they must be so nicely placed

that they seem inevitable, as if the seat could not be moved, and look as well—as if the spot would be bare and uninteresting without it. This inevitableness of position is one of the great charms of all artificial objects in a picturesque scene.

The position of an informal seat is often determined by the view which one may enjoy while sitting on it, but it must have a more obvious justification than that, and should be the focus of the view and itself part of a pleasing composition.

The flag seat at Wellesmere commands a good view, and is the end of a little stretch of lawn beside the house. It is backed by the old



Fig. 1. A Flagstone Seat



Fig. 2. A Rough Stone Block

GARDEN SEATS AT WELLESMEERE



FIG. 3. A SEAT OF SLATE SET INTO A RUBBLE WALL



FIG. 4. A SEAT AT THE BASE OF A FLAGSTAFF

wall, and the box bushes at the sides give it an additional emphasis. A rough stone block often makes a good rustic seat, but that at Wellesmere is, however, badly placed.

Stone, of course, is the finest material for seats because of its own beauty and permanency, which no substitute can achieve—and it is better to have the roughest stone, which has never been touched by the axe, than a more finished looking imitation in cement. There is a worthiness about any stone which cast cement cannot approach. In fact, the only excuse for using concrete is its cheapness and the impossibility of getting stone in some parts of the country. Limestones and marbles are most commonly used for seats, but there are many other stones of more pleasing color and texture which can be used. The pink granites are good, but the gray Quincy or Barre granites are too cold and uninteresting for use in a garden, and the weather gives them no pleasing tones, but makes them rather more dismal. The black, red and green slates are of pleasing texture; the red is a good color, and those streaked with another color are particularly good. The old gravestones of New England give pregnant suggestions in regard to

the use and decoration of slates.

Often, when the stones at hand are poor and fit only for rubble masonry, they can be nicely used for the back and sides of a seat, and an old flagstone built in to make a smoother seat and one free from the ground; or the seat may be of slate, as in Figure 3.

When better stone is used, which is suited for carving, the possibilities of design and ornamentation are endless, and the seat then ranks in importance with the sculptures of the garden; and its merits should be considered as critically. The seat which forms part of the pedestal for the Farragut Statue in Madison Square is a good example of a monumental seat, well proportioned and beautifully decorated, but, like everything else in that unhappy square, it is not placed at all, but has, so to say, been dropped (Fig. 15).

The seat at the base of the flagstaff at Columbia University is another beautiful one, and has the added charm of being well related to the buildings and the plan of the grounds (Fig. 4).

The Italian bench in the Borghese Gardens (Fig. 5) is a familiar type and possibly the best for a garden; certainly, it is better than the unwieldy looking stone seats which approach a chair in form,

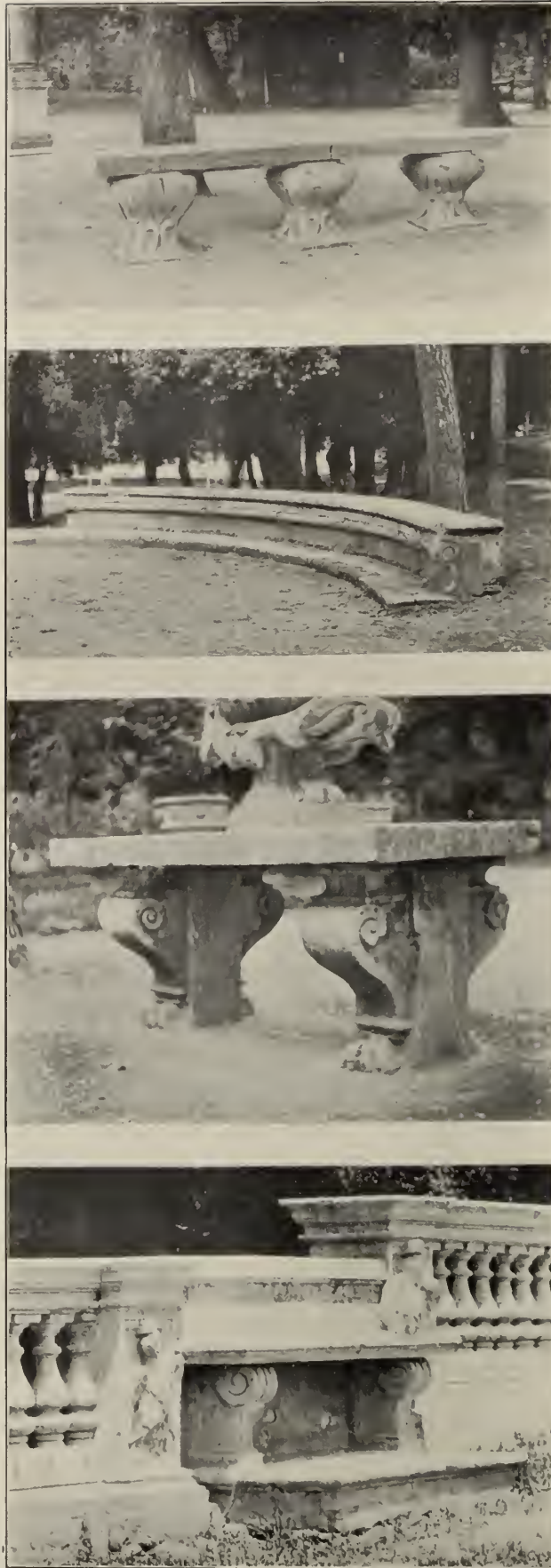


FIG. 5. IN THE BORGHESE GARDENS
 FIG. 6. ONE OF FOUR SEATS AROUND A FOUNTAIN
 FIG. 7. A SEAT WITH DEEP-SET SUPPORTS
 FIG. 8. A SEAT UNUSUALLY WELL PLACED

with legs and arms and back.

Figure 9 is richly carved, and sets a very high standard of excellence for the other stone work in the garden.

These benches are not to be depended on for comfort unless they be placed against a wall,—as they always should be,—(Fig. 13), and they are



FIG. 9. A RICHLY CARVED SEAT OF STONE

The ends can be made very elaborate. Exedras in gardens should not be made too big or one will wonder where all the people are to be found to sit in them; and if they are too small they look crowded with but two people. They should, of course, be always at the dead end of the garden with a high, dense mass



FIG. 10. AT THE VILLA AURORA, ROME



FIG. 11. SEATS AT VERSAILLES

usually made too high. Thirteen inches is high enough for most people, and if additional height is needed, for architectural effect, it can be obtained by raising the bench on a stone platform, which is also pleasanter for one's feet than grass or gravel (Fig. 8). In summer the stone seat needs cushions, if it is to be used for more than a few moments; in winter it should be covered either with narrow slats close together or with a basketwork mat of willow or splints.

Good placing of benches is shown in Figures 8 and 13.

The exedra (Fig. 16) is often of great value as an architectural embellishment of the garden; and the center of the semi-circle, or the middle of the arc of the back, is a good place for a statue.



FIG. 12. A MOVABLE SEAT OF STONE

FIG. 13. A WALL SEAT IN THE MEDICI GARDENS

of shrubs behind them, because the form of the seat pre-supposes that all the view is in one direction and that no one will care to look over the back. Combined with a circular pool, of which it forms the frame and enclosure, on one side, the exedra is most delightful (Fig. 14).

The continuous stone seat as a part of the structure of a garden is very happy, particularly if the garden be public or made to entertain many people.

A seat like Figure 6 would be very good at the sides of a tennis court. Stone is too heavy for such a seat as Figure 12 (Villa Borghese), which in form suggests the portability of wood. In Figure 10 the seat is part of a low retaining wall. In Figure 11 the seat is part of the pedestal of the balustrade, and



FIG. 14. AN EXEDRA BESIDE A POOL

a lower course serves as a foot stone or low seat.

If the cost of stone is too great, then use wood; but let it be used as wood and not as stone. Figure 17 is a wooden imitation of a stone type.

The absence of tables beside all these seats (when they are not at each side of a path) hints at their limited use for tea or for work of any kind which is more comfortably done on a table. Figures 18 and 19 one would think improved by proper tables. Stone tables are frequent and are most often seen with no seats near by.

It is easy to make a good wooden table if the top be of narrow slats placed near together and all securely bolted. This arrangement lets the water off quickly and avoids the warping and splitting which the sun would cause in larger boards.

Circular seats about a tree are never good. They face more ways than Janus, and if

two people sit on one their faces naturally diverge instead of converging as they should in the intimate surroundings of a garden.

Wooden seats with roofs are seldom seen in this country, but are much used abroad and should be here — not that the roof would keep off any of our summer showers, but because it keeps off wind in winter and gives some protection from the summer's sun. Not the least of its charm for some people is the freedom from worms and bugs, which sometimes drop from the leafy tangle of an arbor.

LARGE SCALE GARDENING is

carried on by railroads for the production of ties against future high prices consequent upon the country's decreasing timber supply. The Santa Fe has bought a ranch in California where eucalyptus trees will be planted. The Pennsylvania has planted a large tract in the interior of that state. It will be fifteen years before ties can be cut.



FIG. 15. SEATS AT THE FARRAGUT MONUMENT



FIG. 16. AN EXEDRA BACKED BY A COPSE



FIG. 17. A STONE FORM OF SEAT EXECUTED IN WOOD



FIG. 18. A SEAT WITH BACK OF TILES

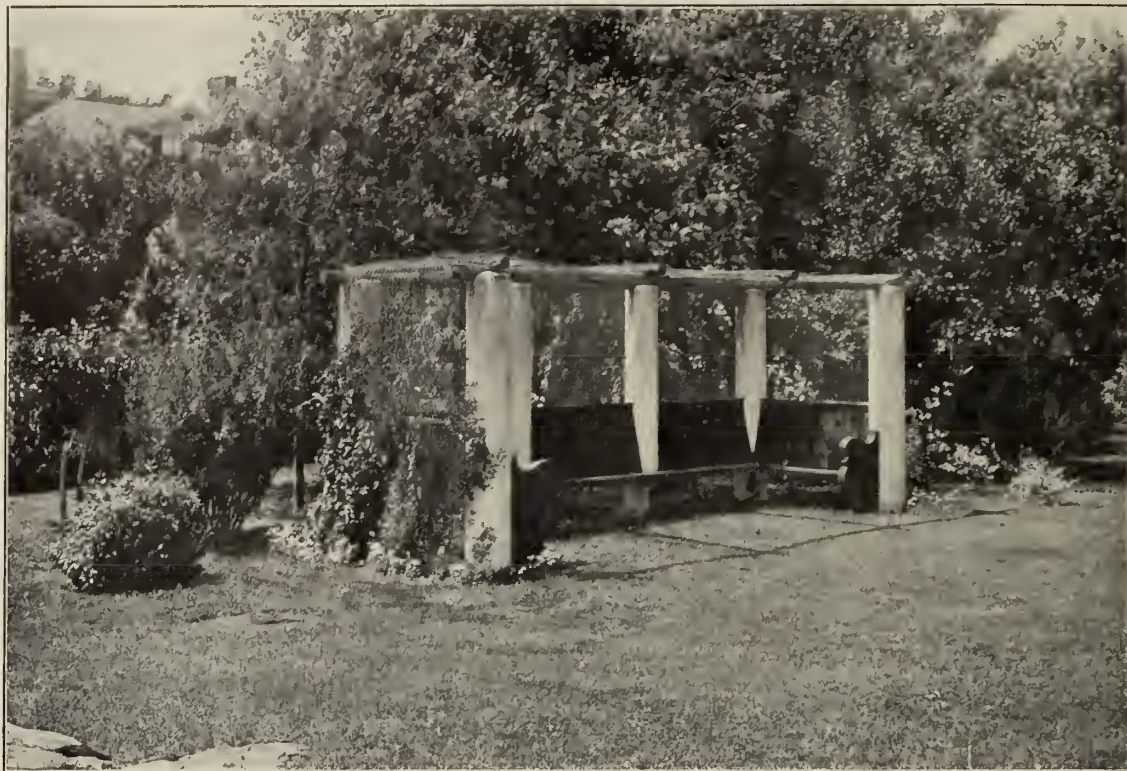


FIG. 19. SEATS BETWEEN PLASTERED COLUMNS AND UNDER A RUSTIC ROOF



FIG 20. AN OLD-FASHIONED RUSTIC SEAT IN AN AMERICAN GARDEN

THE INDOORS AND OUT SERIES OF MODERATE-COST DWELLINGS

Especially designed by Skillful Architects for Readers of this Magazine

Number Two—A House for a Sloping Lot, 60 x 100 Feet

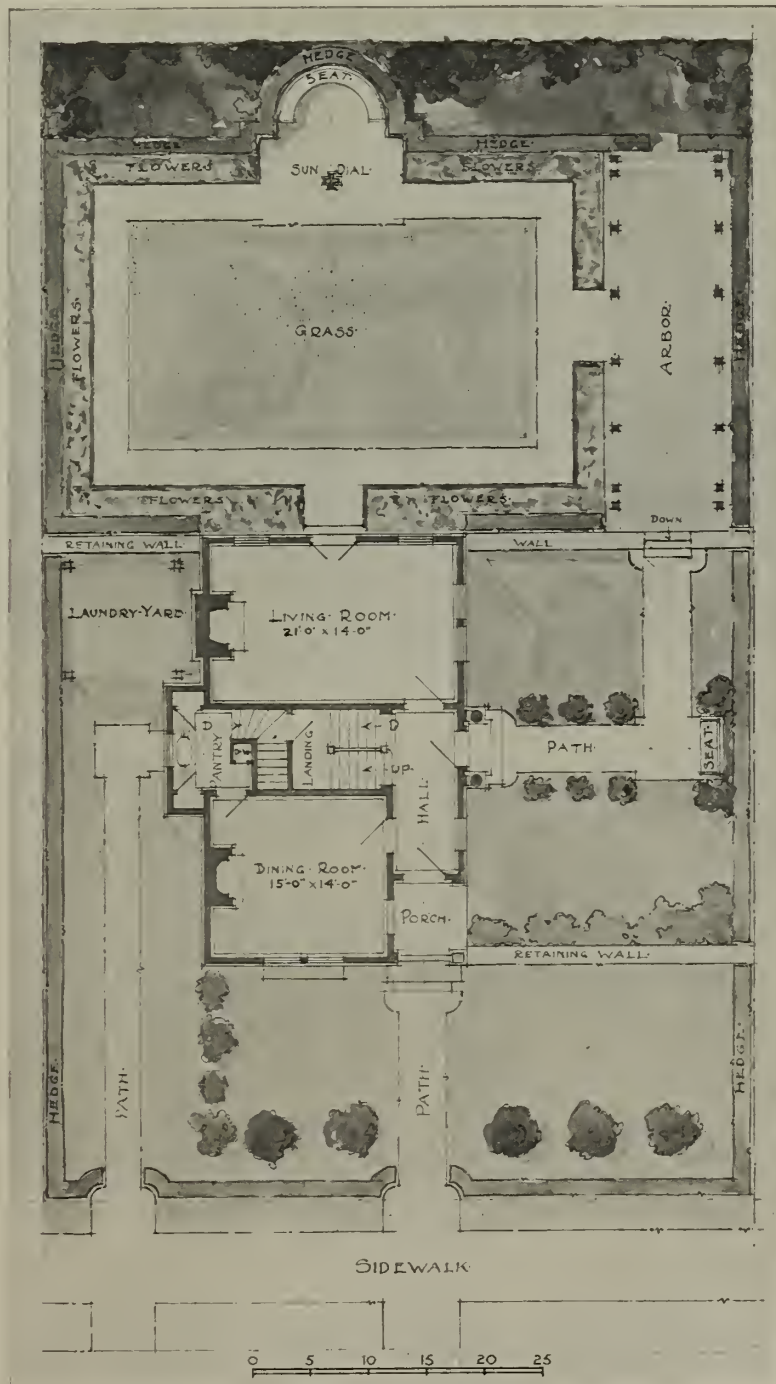
By * * * ARCHITECTS

SHARPLY sloping ground, when it causes a house lot to tip up irregularly from the sidewalk, is commonly regarded as hopeless by a neighborhood whose level sites blossom with level houses, the homes of level-headed and well-regulated families. Such property is usually the last to be bought and developed. It is only the person who instinctively seeks "something different," who has imagination enough to turn the shortcomings of the site into permanent advantages, who will have in the end a most individual and picturesque dwelling. He will have also at the outset the advantage of paying the minimum price for his land.

The cost of grading has, of course, to be taken into account, but this can be done year by year after the house is built. By so doing, the item of excavating for the building is

almost wholly avoided, for the cellar lies already dug when the deed is signed, and developing one's ground slowly, after occupying the house, is nowadays counted as the pleasure of building. It affords entertainment, covering several years, of an undertaking which otherwise is crowded into an exciting six months.

The house must be built at a small outlay; therefore, the plan must be compact and economical. It must minister to simple housekeeping; therefore unconventionality is an attraction expected. By referring to the accompanying drawings, which are to offer a suggestion for the development of a sloping lot, 60 x 100 feet, it will be seen that the visitor is to first enter the basement, which is level with the sidewalk. Ascending a two-flight stair, he arrives at the first floor nearly level with the front portion of the



PLAN OF THE FIRST FLOOR AND THE GARDENS



A VIEW OF THE HOUSE FROM THE STREET

garden. The dining-room is at the front, secluded by its height from the street, and served by a pantry having dumb-waiter connection with the kitchen. At the back is the living-room looking out upon a secluded garden. The stairway continues to the second floor, where there are three bedrooms, a bathroom and ample closet space. There is no third floor, but a loft, reached by trap-door and a ladder swinging out from the wall, affords an abundance of dry storage space.

The basement story is of stone and the upper portions of frame and roughcast.

The house measures 22 x 38 feet, exclusive of the bay at the side. The cubic contents and the cost corresponding thereto is kept down by having the ceilings 7 feet 3 inches high. Leaving out of consideration for the present the walls retaining the terraces of the garden and giving space for the laundry yard, a responsible builder

has computed the cost of building the house approximately as follows :

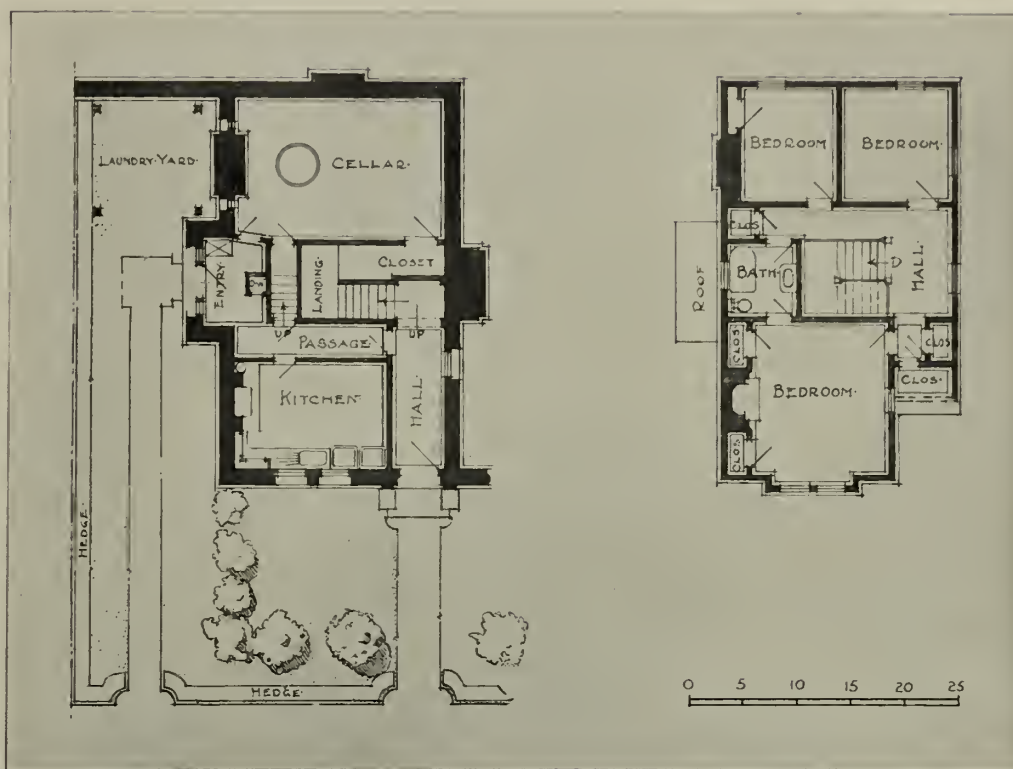
Excavating wall trenches on two sides	\$20
Foundation stone work	100
Face stone work	250
Two brick chimneys	100
Rough lumber	420
Shingles	70
Doors and windows	300
Outside wood finish	150
Interior plastering	250
Outside roughcast	350
Stairs	150
Interior finish	225
Fireplaces	140
Nails, paper, flashing, etc.	50
Finished hardware	75
Plumbing	400
Flooring	140
Heating (hot air)	200
Painting	125
Dumb-waiter	25
Labor	600
Sundries	160

\$4,300

These figures are based upon the house being built in a neighborhood where stone is abundant and near at hand. If moisture is feared upon the basement walls retaining the garden, the stonework should be pointed tightly on the outside and the whole surface given a heavy coating of tar. This would cost about \$25. The wall should also be furred inside. For this add \$15 or \$20.

A warm gray wall, green window blinds and door hood, and a roof reddish-brown color will afford an agreeable color scheme which the developing of the garden will do nothing but enhance.

ELECTRIC SIGNS MUST GO is the order given in Chicago. By an edict of the Mayor the winking, blinking, wriggling electric signs and whirligigs that have disfigured State Street, the city's chief retail thoroughfare, are to be extinguished. Let us hope they will always remain so and not again blaze forth as an abnormal firmament over a future administration weak in its leniency. Small shops and five-cent theaters must henceforth rely for business upon the argument of words,—strong words, perhaps, but words that can at least be calmly read by the passer-by, who still has nerves and wears no smoked glasses. All overhanging signs are to be cleared away and only signs parallel to the buildings permitted. This is only one instance of Chicago's aiming to improve its appearance,



PLAN OF BASEMENT

870 Square Feet on Each Floor

PLAN OF SECOND FLOOR

Approximate Cubic Contents of House, 27,840 Cubic Feet

and is insignificant beside a project now before the local council for a boulevard system covering seven miles of streets. Many smaller cities, however, might begin the work of beautification by realizing the ugliness and danger, and often the indecency, of the electric signs, and forthwith suppress such disfigurements.

CIVIC IMPROVEMENT IN BERLIN

on an important scale is comprised in the project to widen by twenty feet the narrowest part of the well-known Friedrichstrasse, and to replace the present insignificant shops and houses by magnificent hotels, arcades and public buildings. Friedrichstrasse is second only to the famous Unter den Linden which it crosses at right angles, and the proposed improvement, if carried out, will make the former one of the world's finest thoroughfares. The scheme involves an outlay of \$37,500,000.



The Mission Style in Modern Architecture

By GEORGE WHARTON JAMES

III. Details in the Mission Structure

IN this paper I wish to show that the padres exercised a remarkable individuality in the respective buildings, so that while, as a whole, these structures present to us a compendium — the complete text-book, as it were — of the Mission Style, the builders were neither servile imitators of originals, nor copyists one of another. These diversities are pleasing, and to the architect they are suggestive as showing how one may utilize ideas in original and distinctive ways.

In discussing these diversities of detail, it is my purpose not only to show how many there are, but also to discover the motive that led to the variations. In some cases these motives are readily apparent, in others they come from a study of the conditions that existed at the time the buildings were erected. The structures thus become to us manifestations of history, even as our architecture will later become to our descendants.

A most cursory survey of the mission buildings shows diversity in *fachadas*, bell-towers, ped-

iments, columns, buttresses, arches for doors and windows. Let us now consider some of these.

I. *FACHADAS*. There are several types of *fachadas*. The simplest is where one end of the church building is taken, with little or no attempt at adornment, and used as a front. San Juan Bautista well illustrates this. The Mission of San Miguel has this same *fachada*. San Luis Obispo uses the same method, with the addition of three piercings in the upper story for the bells. This gives a pleasing relief. Santa Ines is the same, the deep reveal of the window over the entrance affording a good shadow effect. San Francisco de Asis uses the end of the church, but a somewhat elaborate method of adornment, though simple in its members, has been attempted.

At San Buenaventura the same method of using the end of the church as a *fachada* is carried out; but it is made imposing with its massive tower at the right, and the large-hipped buttress at the left. Here, too, the arched and corniced doorway, with the simple pilasters, and the trian-

gular entablature pierced by a square window aperture and a bracketed niche for a statue, break the monotony.

San Gabriel has a simple *fachada*. Here the side, instead of the end, of the building is made to serve this architectural purpose (see page 53, *MAY INDOORS AND OUT*). La Purissima has no *fachada*, the entrance being under the corridor. A simple, yet most unique and pleasing *fachada* is that of San Antonio de Padua. It is some ten or twelve feet in advance of the front end



THE PRESIDIO CHURCH AT MONTEREY



SAN CARLOS BORROMEO BEFORE RESTORATION



SAN CARLOS BORROMEO AFTER "RESTORATION"



SUMMIT OF THE BELL TOWER, MONTEREY

of the church. Then the intervening space is arched over to form a closed entrance. This *fachada* is of burnt brick, although the church is of adobe, and, while the latter is in sad ruins, the former is almost as perfect as when built.

To the casual and careless observer the *fachada* of Santa Barbara is regarded as the most beautiful in the Mission Series, because it is the most ornate. Padre Antonio Ripoll, who not only superintended the erection, but was doubtless responsible for its architecture, was a man of wide culture and classical tastes. It is to him that we owe the introduction of the Greek elements. Had these not appeared, Santa Barbara would have been a pure specimen of Mission architecture and would have ranked almost side by side with San Luis Rey in importance as a type structure, but it cannot be denied that the intrusion of these features is a detriment rather than a benefit. In his desire for ornamentation the good padre was led into a meretriciousness that detracts from the purity of his work, and that renders it inferior to that of his great co-worker, Padre Peyri, at San Luis Rey.

The presidio church at Monterey has another of the *fachadas* ruined by attempts at ornamentation. It is overdone. It is pretentious, and not

growing simply out of the needs of construction; it is meretricious, not being good enough to be classic. Were such work a clear manifestation of some man's, or body of men's, endeavors to beautify the structure because of their abounding love which must find expression in this way, the result could scarcely fail to be high art, and therefore classic. But here the aim is low, in that it is a mere attempt to produce ornamentation by commonplace methods, by the sticking on of something, and the result, therefore, is a lowering of the architectural purity and strength of the building.

The illustrations of the *fachada* of San Carlos Borromeo before and after "restoration" show the lamentable and deplorable bumbles zealous but ignorant renovators are constantly making. Carefully study these two *fachadas*. In the original building the simple arch of the *fachada* connected the two towers, and upon it rested a small pedimented pedestal upon which the cross was placed. But when the "restorers" came they destroyed this simple, natural effect. They must put on a steep-pitched roof, in imitation of the bastard Gothic structures of the city of San Francisco, and entirely incongruous and inharmonious in this building. To do this, an addi-



SIDE ENTRANCE OF SAN BUENAVENTURA MISSION

tion must be made to the *fachada*. A pointed gable wall is erected above the arch, burying the standard for the cross, and totally changing the character of the building.

San Luis Rey, the type structure, is now the only *fachada* left for our present consideration, as the missions not named have lost their claim to be considered, either because they have disappeared or are too far in ruins. This *fachada* is divided into three unequal portions (see page 58, May INDOORS AND OUT). The ends of the two outer walls of the main building are faced with pilasters which support the cornice of the pediment. Below the cornice and above the entablature is a circular window, with a deep reveal. The entablature is supported by engaged columns, upon which rests a heavily molded cornice, the whole forming a pleasing architectural effect about the doorway, the semi-circular arch of which is especially fine. There are three niches for statues, — one on either side of the doorway, and one in the center of the pediment. On this pediment occurs a lantern which some architects regard as misplaced. Yet the fathers' motive for its presence is clear, — that is, the uplifting of the Sign whereby the Indians could alone find salvation.



ADOBE BRICKS IN LOZENGE PATTERN AT SAN LUIS REY

Here are simplicity, dignity, purity and, therefore, beauty. No other ornamentation is needed. The *fachada* is complete as it is. Built, though it be, of simple brick, and plastered over, it stands as a model, a pure piece of architecture for the ages to be grateful for, to receive inspiration from and to profit by.

2. BELL TOWERS. In the various campaniles of the missions we shall find that the padres exercised great individuality. There are fourteen missions or chapels which have (or had) distinct bell towers, not including the individualistic one at Pala. Perhaps the campanile of San Gabriel is the one best known and oftenest pictured. Somewhat similar, in that it consists of the extended wall, though possessing its own individuality, is the campanile of Santa Ines.

In the case of San Antonio de Padua, the campanile is the upper part of the *fachada*, which, as I have already shown, is an extended wall, but instead of being attached to the side or end of the main building, it stands detached from and before it.

The campaniles of San Luis Obispo, San Rafael and Santa Cruz have disappeared, the first named having been simple piercings for three bells in the upper story of the *fachada*, as at San



DISTRIBUTING ARCH OF ADOBE AT SAN ANTONIO



CURVED ARCH OVER CHAPEL DOORWAY
San Luis Rey



DOORWAY LEADING TO SACRISTY
At San Carlos Carmelo



CEMETERY DOORWAY
Santa Barbara Mission



AN ENTRANCE TO THE PRESIDIO CHURCH
Monterey

SEP 10 1914

Francisco de Asis. San Juan Capistrano belongs to the pierced wall variety. In the chapel of Los Angeles, a new bell tower in Mission Style has been added within the past year. There are five structures still remaining with bell towers of the domed variety, though, as will be seen, these are far from being uniform in style.

At Santa Barbara, towers that flank the *fachada* are surmounted by semi-circular domes of masonry construction with cement finish, above which rests the lantern, surmounted by the cross. This lantern is a marked feature of mission construction. It is seen above the domes of San Buenaventura, San Luis Rey, San Xavier del Bac (Arizona), as well as on one or two of the old churches at San Antonio, Texas.

Very similar, except that the chamfers are wider, is the single dome of San Luis Rey. That of San Buenaventura is practically the same, save that it has no chamfers, and the corner finials are different.

The careful observer may note another distinctive feature which is seldom absent from the mission domes. This is the series of steps at each "corner" of the half-dome. Several eminent architects have told me that the purpose of these steps is unknown, but to my mind it is evident that they were placed there purposely by the clerical architects, to afford easy access to the surmounting cross; so that any accident to this sacred symbol could be speedily remedied. It must be remembered that the fathers were skilled in reading some phases of the Indian mind. They knew that an accident to the cross might work a complete revolution in the minds of the superstitious Indians whose conversion they sought. Hence common, practical sense demanded speedy and easy access to the cross in case such emergency arose.

The campanile of San Carlos Carmelo is unique

and individualistic, in that the single dome is egg-shaped. The bell piercings are plain arched openings in the second story of the unadorned tower. That of the presidio church at Monterey is similar in the second story, but the egg-shaped dome gives way to a pyramidal crown covered with brick tiles. This pyramidal tiled tower is a useful and structural device. It is perfectly adapted to its two purposes, *viz.*, the uplifting of the bells and the cross; the former that, as the sound peals forth, it may reach farther, and the latter, that it may be seen at a long distance, and also that it might surmount, crown and dominate every other object of the building.

3. PEDIMENTS. At first one might believe that little or no diversity could occur in the mission pediments, yet important variations may be observed. If we take that of San Luis Rey as the typical curved and stepped pediment, we shall find that it stands absolutely alone.

Now compare this with five other existing pediments, those of San Gabriel, San Carlos, San Diego, Santa Ines and San Antonio. At Santa Ines we find a succession of convex curves, three in the series dropping down from the central arch on which the cross rests, making the pediment. The pediment of San Antonio is again different. The bricks of the crown are



ELABORATELY CARVED ENTRANCE TO THE CHAPEL OF SAN JUAN CAPISTRANO

stepped, there being eight or nine layers. Then follows a double brick cornice, the edges of the brick being molded to the half-round. Next is a concave curve, a perpendicular step, resting on a flat platform, followed by two more concave curves of unequal length.

An addition is generally made to all the pediments. This consists of a part of the main front wall raised above the pediment in pedestal form, and tapering in small steps to the center, upon which rests a large iron cross. This was undoubtedly a simple contrivance for effectively supporting and raising the Emblem of Salvation, in order, thereby, more impressively to attract the attention of the Indian beholder.

This brief survey shows that no two pedimented gables are alike.

4. COLUMNS. It is a question that requires some careful thought as to what columns can legitimately be used in mission buildings without vitiating the purity of the style. A column itself is often an architectural necessity. The adornment of that column which relegates it to a set architectural style is an adjunct, not an absolute requirement. Here, then, I deem it, we have the key to our problem. A simple column, of any form, used for a definite purpose, in harmony with the rest of the structure, is legitimate in the Mission Style.

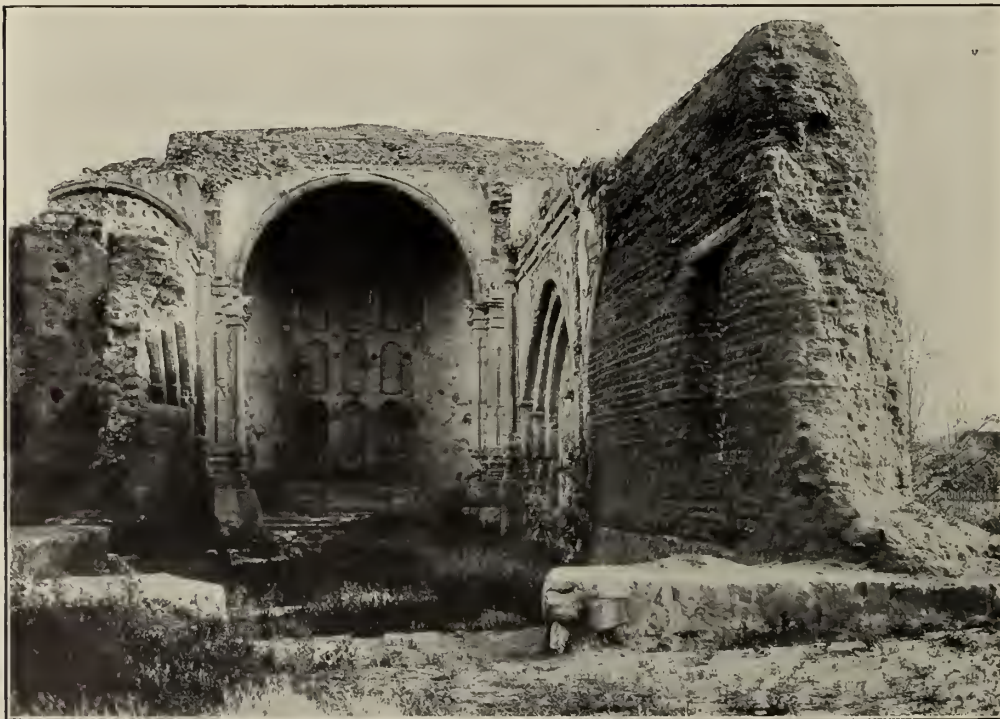
The columns of the *fachada* at San Francisco have already been described. The square piers for the colonnades of nearly all the missions are built of brick and plastered. At Santa Barbara they have chamfered corners and occasionally, as in the colonnade of the *patio* at San Antonio de Padua, they are built of adobe; but generally burnt bricks were used. At La Purísima Concepción, the nineteen remaining pillars are square, with chamfered and fluted corners, some of them being brick, some of stone and some of adobe, and all plastered.

The "gnawing tooth of time" wears away objects that are neglected much more quickly than those which are cherished. Here destruction proceeds in increasing ratio. The exposed brickwork of the piers of the colonnade at San Antonio is rapidly eroding, and if nothing be done to arrest the decay, the masonry will soon crumble and fall.

The pilaster was used quite often by the mission architects to good advantage. At the side entrance of San Luis Rey, the supporting column of the entablature above the side entrance is of chamfered and fluted brick. Much of the missionaries' brick was thus molded at San Luis and elsewhere: a point worthy of note.

Another interesting feature is shown in this picture. As it is difficult to make plaster adhere to adobe, in order to obtain an anchorage, the adobe walls, here and in other mission buildings, were divided into lozenges into which small pieces of brick were placed. These lozenges can be seen near the foot of the stairway in the picture and they are observable in many exposed portions of the walls throughout the whole line of the missions.

5. BUTTRESSES. Without spending much time over the subject it is both interesting and instructive to



ARCHES OF THE RUINED CHURCH AT SAN JUAN CAPISTRANO

compare the various buttresses used in the mission buildings. At San Gabriel they are small, square engaged towers that reach to the top of the wall, completely banding the whole structure together from one end to the other. At La Purisima, two massive sloping buttresses support the end wall in view, while at Santa Ines and on the *fachada* at San Buenaventura, great hipped buttresses are used.

6. ARCHES. It is in the arches that the padres showed their individualism. The variety, although nearly all of the same included within the limits of simplicity, is far greater than one might suppose.

Of prime interest, because it was probably the first arch built, and in any case the principal arch of the first mission established, is the main entrance at San Diego.

The arch proper at San Antonio is of brick, as is also the first distributing arch. Between the two are laid horizontal adobe bricks with above a second distributing arch, the latter of adobe bricks.

At San Juan Capistrano is one of the most ornate of the stonework doorways found in the missions of the southwest. Indeed, the stonework at San Juan suggests that this mission was the object of more care and work than any of the others. This fact is evident from the most cursory survey. Here is cut stonework done by master hands, all the piers and arches being of work that the best craftsmen of to-day would be proud to own.

The cemetery doorway at Santa Barbara is

(To be continued)

"AN EASY STAIR WE MUST HAVE," chorus the entire family to the architect, whereupon a discussion ensues as to what an easy stair is, and the veil is momentarily lifted from a seeming black art. A stair is easy or difficult to mount, according to the relation between the "tread" or level part, and the "rise" or vertical part. This relation can be computed in several ways. Some architects reason that if the tread be multiplied by the rise and the result falls between 70 and 75 the proportion for a satisfactory main stairway of a dwelling is obtained.

Example: Tread, $10\frac{3}{4}$ inches; rise, $6\frac{3}{4}$ inches. These figures multiplied give 72.56, an ideally proportioned stair.



ROOF TIMBERS BOUND WITH RAWHIDE
At the Mission Dolores, San Francisco

interesting for several reasons. Not only do the emblems of mortality, in the three sets of skulls and crossbones, suggest the cemetery itself, as well as that for which the cemetery exists, but here is a simple arched doorway built of stone, the base and supports of which are grooved in unaffected adornment. The structural simplicity of the door should also be observed.

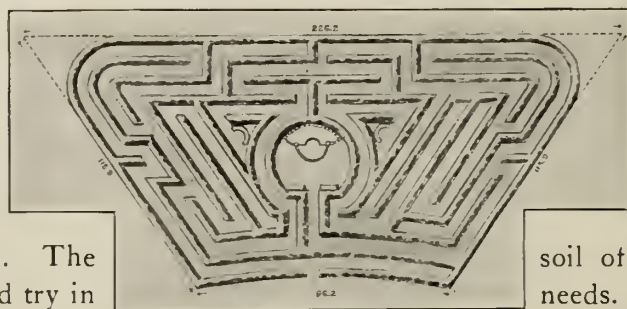
Before concluding this necessarily cursory survey it may not be uninteresting to show one more peculiarity of mission construction. In supporting the heavy tiled roof of the mission at San Francisco, it will be observed that the timbers are tied together with rawhide, and that they *have no other fastening*, though rudely hewn to key together. After many severe shocks of earthquake, this old mission roof still remains.

Another rule is that the rise and tread when added should fall between 17 and $17\frac{1}{2}$ inches. Another, that the sum of two rises and a tread should not be less than 24 nor more than 25 inches. Thus the "ease" of a stair can be readily assured; but these rules, it should be remembered, apply only to stairs with "nosings," as the portion of the tread which projects in the shape of a molding is called. For a stone stair, without nosings, to be comfortable for adults the tread should be greatly increased in proportion to the rise, *e. g.*, 12-inch tread to 6-inch rise; and steps outdoors should be even further flattened; *e. g.*, 14-inch tread to 6-inch rise.



A 17TH CENTURY MAZE 11 YEARS OLD.

— Upon an estate in Waltham, Mass., is a garden maze,—probably the only one in this country,—typifying the devices of the old English gardeners to afford amusement to the knights and ladies of the seventeenth century. One thousand trees of arbor vitæ (*Thuja occidentalis*), planted in the manner shown by the diagram, have grown to a height of about three feet, and so dense that they can be readily kept neatly trimmed. To this reminiscence of Hampton Court may not the garden party of to-day be introduced? Prizes might be offered to the one who finds the center quickest, while the butt of laughing spectators. The hedges are so low he would try in vain to hide his missteps and fruit-



PLAN OF THE MAZE



PERSPECTIVE VIEW OF THE MAZE

less sallies. The shortest way to the center is 949 feet or .18 of a mile. The total length of the paths is about three-tenths of a mile. The first tree was planted May 6, 1896.

REPOTTING PLANTS. — When a plant really needs repotting, as sometimes becomes the case from a diseased condition of the roots or the presence of vermin, such as root lice or worms in the soil, the plant should be turned out of the

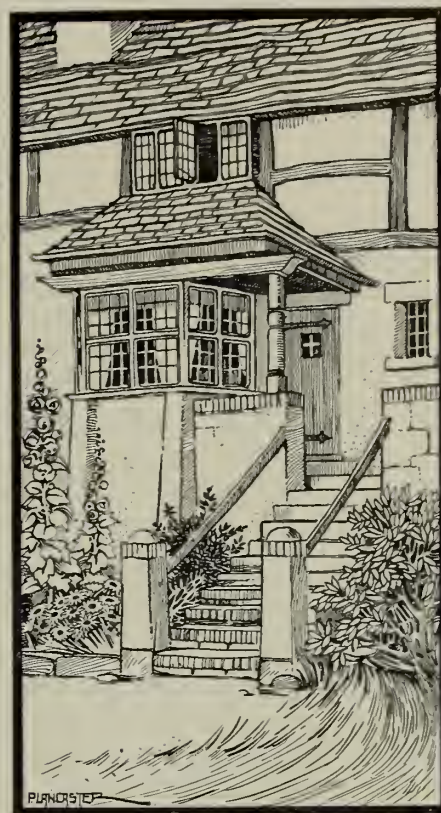
pot and the soil removed as carefully as possible, shaking out all that is loose and dry, soaking and washing out the remainder. It should then be repotted in fresh, clean soil of a character suited to its needs. Usually a good compost, composed of fibrous loam or the soil shaken from the underside of a piece of sod, leaf mold, clean, sharp sand and a small quantity of old, well-decayed manure or some bone meal, will be found to agree with the plant. For ferns, begonias and fuchsias a greater quantity of leaf mold will be required, while for geraniums more loam should be used. All hard wooded plants, such as the hibiscus, orange or fuchsia, should be potted very hard, while succulent growths, as the *Impatiens sultana*, begonias and the like, should have the earth pressed only moderately

hard about their roots. The crown of primroses should be higher than earth at the rim of the pot, while the reverse is true of heliotropes.

AT THE MOUNTAIN COTTAGE, however surrounded with nature's wild tangles, there are doubtless bare spots left by the building operations. Perhaps a newly built wall stares you in the face. Something must be planted at once. But what shall it be? Now it is an axiom of good garden craft to keep the scene as nearly as possible as Nature made it, from which some have supposed they must gather wild bushes and vines, and start them in new places. But the housewife from the city, who did so, was woe-fully disappointed that all the things she transplanted straightway died. It is part of Nature's habit not to be so easily managed. You went to her for her wildness. She is still in untamed state, and disregardful that you bought a house lot in her midst. For your vines and shrubs go to your nurseryman. In rearing these he has accustomed them to transplanting, and the chances are fair they will grow, if properly planted and tended. If flowers are wanted on these high hillsides there are few of the so-called "Alpine" plants that are not suitable. Reference to a florist's catalogue, in which these are listed separately, will give many suggestions that can be relied on. It is then only necessary to make intimate acquaintance with the plants. For barriers, windbreaks and other fixed plantings, the native thicket near by will give suggestions. But to tamper with it is useless. Get your plants where they have been reared for your use. And have a thought for the place in its winter solitude and do not fail to use some evergreens.

THE RETURNING ENTRANCE PORCH.—Now that so many persons have come to realize the advantage of setting the front of the suburban house near the public road and reserving the utmost garden space at the back, there are new possibilities in designing the house itself. The veranda is placed to the satisfaction

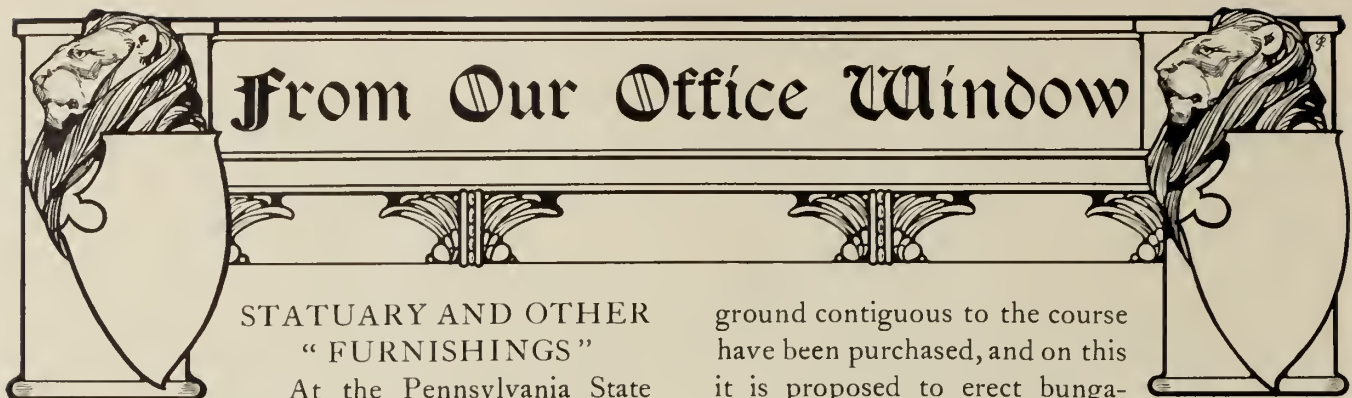
of all at the rear beside the quiet delights of the garden. At the front there is opportunity to develop the entrance porch. Many of us scarcely know it. But we have only to recall the charming old examples to be seen a broad (where wide front verandas are eschewed), and to remember how invariably even the modern English architect adorns his house with this delightful feature, holding a welcome for the visitor and giving a first impression not easily forgotten. The columned entrance porch with seats at each side is used on Colonial houses, but that is but one form. There is the porch combined in an infinite variety of ways with steps rising amid shrubbery, with an oriel window or picturesque pent-roof merging happily into the structure behind it. There is no more beautiful house feature than this, and skillful planting may make of it a veritable picture.



AN ENTRANCE PORCH COMBINED
WITH AN ORIEL

A BOX HEDGE often suffers from starvation. It is a gross feeder and its sign of hunger is to turn yellow. It should have a dressing of manure at least annually, in order to keep it in good health and color. It should never be permitted to become overgrown, the wood being one of the hardest and toughest to cut back into shape.





STATUARY AND OTHER "FURNISHINGS"

At the Pennsylvania State Capitol, bookcases, rolling-top desks, chandeliers and cuspidors are known as "furnishings." They were contracted for at a fat price, far beyond their value. Nor was this value delivered by the political contractor who is now able to retire upon his ill-gotten gain.

Beside the main portal there was designed to be placed two heroic groups of statuary, one representing the "pain of labor," the other the "joy of labor." This work was "closed for" at a figure far below the cost of execution,—a mistake, perhaps, on the part of the sculptor, but nevertheless George Grey Barnard has done his work, and done it well, as far as the money at his command would permit. The photographs which have come from his studio in Moret, France, exhibit groups of statuary boldly conceived and remarkable in execution. There are few public buildings in the world that would not acquire fame by the presence of these alone. Work on them has stopped. The models are collecting dust in the marble yard at Carrara, where Italians hear with amazement that America has run out of money. Rather, have a few politicians in America chosen to line their pockets under the guise of purchasing luxurious furniture, while vainly attempting to save money upon a work of fine art. But legislators in Pennsylvania must spit into extravagant cuspidors and visitors to the Capitol must fail to find at the entrance its fairest ornament. It is not unnatural that the inspiration the sculptor drew from Pennsylvania and its industries has withered. Henceforth he sees only the "pain of labor," while none of his countrymen are permitted to see the result of his effort.

COUNTRY-CLUB BUNGALOWS

Possession of a country home without the care of grounds is offered by an interesting scheme the Baltusrol Golf Club is about to carry out in Northern New Jersey. About twenty-five acres of

ground contiguous to the course have been purchased, and on this it is proposed to erect bungalows which members may lease for the season or for week-end parties. These informal cottages lining picturesque avenues will make the bungalow settlement a world in itself for the enjoyment of summer days. All a member will have to do will be to telephone from town when he will arrive and how many his guests, and a valet will stock the larder, light the kitchen fire and otherwise put the bungalow in readiness for occupancy. This is to entertain in one's house with the least burden. Any shortcomings are excused by the idea of a picnic, for such a week-end in a bungalow is gleefully hailed by all who are fortunate enough to enjoy it.

A MOSQUITO SEASON

must be bravely faced this year. We have weathered through a cool, green spring, and it is not pessimism that bids us prepare ourselves for its results. One of these is the mosquito, which, like gnats and midges, have been noticed to flourish in a "demm'd, damp, moist, unpleasant environment." Other adjectives will be raised as distress signals by guests at the garden party, where tables had better be set on high ground and the supply of joss-sticks be made liberal. Those who think beforehand of comfort will assume high shoes to be *de rigueur*. Cigarettes will gain in favor. The supply of witch hazel in the medicine closet must be replenished, the house screens inspected; perhaps the veranda enclosed. Patience of mood and mastery of the art of retiring in the dark are a few remaining essentials. Let us not be altogether hopeless, however. Government commissions are making inroads on the large family of our national pest. Had we statistics of the killed at hand,—not to mention the unborn,—we should be glad to console the reader. Until these are officially computed, there is solace to be gained from a lush season when the fields remain fresh, the gardens thicken apace and the lawns exult in growing instead of expiring in sun-scorched patches.

INDOORS AND OUT

THE
HOMEBUILDERS
MAGAZINE

AUGUST 1907



ROGERS AND WISE CO.-PUBLISHERS
NEW YORK BOSTON CHICAGO

The advertisement features a decorative border and a central geometric pattern. The border is composed of a dark green outer line and a white inner line with a repeating cross-hatch motif. The central pattern is a large, symmetrical geometric design made of interlocking squares and crosses. It has a central red star-like shape, surrounded by green and white squares, with red crosses at the corners and midpoints of the inner squares. The text is printed in a serif font, following the curve of the border and the central design.

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NEW YORK BELTING & PACKING CO. LTD.
91 & 93 CHAMBERS STREET, NEW YORK.

Indoors and Out

A MONTHLY MAGAZINE DEVOTED TO THE BEAUTIFYING OF AMERICA
CHIEFLY BY MEANS OF ARCHITECTURE AND THE ARTS ALLIED TO IT

ROGERS AND WISE COMPANY
PUBLISHERS 85 WATER STREET BOSTON

NEW YORK
4007 Metropolitan Building
1 Madison Avenue

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Entered at the Boston, Mass., Post Office as Second-Class
Mail Matter, October 14, 1905.

CHICAGO
302 Ellsworth Building
355 Dearborn Street

SUBSCRIPTION PRICE \$3.00 A YEAR IN ADVANCE. FOREIGN SUBSCRIPTIONS \$4.00
SINGLE COPIES 25 CENTS

For Sale by All Newsdealers in the United States and Canada and by The American News Co. and its Branches

Contents for August

VOL. IV

1907

No. 5

FROM THE DOORWAY OF AN ARCHITECT'S HOME IN PASADENA	Frontispiece
HOMES IN THE LAND OF SUNSHINE	By Florence Williams 197 (Illustrated)
THE INDOORS AND OUT SERIES OF ARCHITECTURAL NOVELTIES.	
I. A Bungalow made out of an Old Windmill.	By Edward W. Gregory 207 (Illustrated)
CELEBRATED FORMAL GARDENS OF AMERICA.	
I. A Green Garden	209 (Illustrated)
THE GUEST LODGE	212 (Illustrated)
A MODERN ENGLISH DWELLING HOUSE	216 (Illustrations)
HOW TO FURNISH A BUNGALOW.	
IV. Buying the Furniture	By Florence Finch Kelly 217 (Illustrated)
CEMENT AND CONCRETE FOR ARCHITECTURAL ORNAMENT	By Samuel Swift 221 (Illustrated)
HOW BILL JONES BUILT A FIREPROOF BUNGALOW FOR \$2,500, By Hubert G. Ripley	229 (Illustrated)
THE MISSION STYLE IN MODERN ARCHITECTURE.	
IV. The Patio in Mission and Modern Buildings. By George Wharton James	232 (Illustrated)
NATURAL AND ARTIFICIAL BATHING POOLS	239 (Illustrations)
A TYROLESE HOUSE IN AMERICA	By G. S. H. 240 (Illustrated)
THE HOME GROUNDS	243
FROM OUR OFFICE WINDOW	244



FROM THE DOORWAY OF AN ARCHITECT'S HOME

IN PASADENA, CALIFORNIA

Myron Hunt, Esq., Architect and Owner



Indoors and Out

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VOL. IV

AUGUST, 1907

NO. 5

Homes in the Land of Sunshine

COTTAGES AND BUNGALOWS OF SOUTHERN CALIFORNIA
BY FLORENCE WILLIAMS

AMONG all that Southern California has to boast, there is nothing of which she is more justly proud than the charm of her country homes; the cottages and bungalows that, overhung by pepper trees and nestling among vines and flowers, quite win the heart with their air of peace and comfort, so at one with the character of the land.

Many of them are unrivalled in their completeness, thoroughly meeting not only the individual needs of the owner and of the climate, but the demands of really good building as well. The con-



AN "ARABIAN NIGHTS' HOUSE"
In Cahuenga Pass

struction, the decorative lines, the arrangement of the rooms, even the least detail of interior finish, coloring and furnishing are planned in consistent relation to each other, so that every little part will aid, both in making the practical working of the house as convenient as possible and in the creation of an original artistic effect for the whole. To the latter end, the house and garden are often designed together so that the garden will conform to the lines of the house and the planting control the view, with the result that from within doors, interesting perspec-



AN ARCHITECT'S HOME AND GARDEN IN PASADENA



The Reception Hall

INTERIORS OF SENATOR COLE'S RESIDENCE AT COLEGROVE

George T. Cole, Architect

For the Finish Californian Redwood has been used throughout



A Portion of the Dining-Room



The Exterior of Roughcast and Decorative Timbers
SENATOR COLE'S RESIDENCE AT COLEGROVE



The Living-Room



A PERGOLA IN A BUNGALOW GARDEN

ives open, leading perhaps from room to room and finally through glass doors down a brick-paved pergola overgrown with luxuriant vines, or into a sunny courtyard, or broad shady veranda, furnished and used as a living-room. Sometimes adjoining the dining-room there is a porch where, all summer long, breakfast and luncheon are served in the open air.

The furniture, too, is considered as a part of the whole; generally the side-board, bookcases and window-seats are built with the house, and often much of the other furniture is designed by the architect and executed by local workmen, thus insuring consistency of style and originality, as well as a lessening of expense.

An interesting house is that just completed at Colegrove, planned by Mr. George T. Cole. It is so



Plan of Senator Cole's House

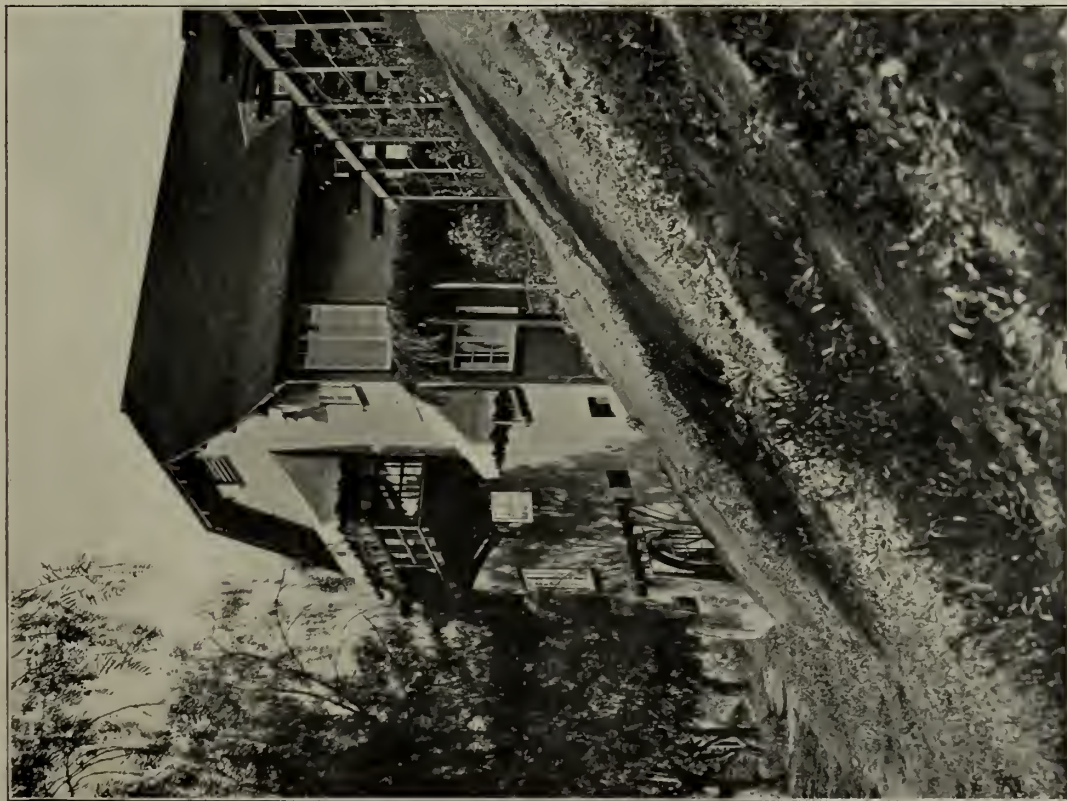
graceful in line that one hardly misses the garden, which is still in the making. Its construction is unusual, for the foundation is reinforced concrete and the walls above the water-table, between the uprights, are hollow tile bound together with cement and metal lathing; the outer surface is roughcast plaster, whose soft brown color blends well with the beaming. Half the shingles are dipped dull red and half moss green, and put on "hit or miss," adding greatly



INTERIOR OF MR. C. W. HOLLISTER'S BUNGALOW

At Hollywood

Greene & Greene, Architects



A ROUGHCAST GABLE END
Of Dr. Guy Cockran's House in Los Angeles



A GLIMPSE OF A HOLLYWOOD BUNGALOW
With Hedge of Martha Washington Geraniums in the Foreground





ENTRANCE FRONT OF DR. GUY COCKRAN'S HOUSE
Myron Hunt and Elmer Grey, Architects



UNDER THE PEPPER TREES IN A COTTAGE GARDEN

to the effectiveness of the curving roof. The floor plan shows a direct and simple arrangement with no waste space. Upstairs, in the highest part of the roof, are Mr. Cole's studio and several bedrooms. The interior is one of simple dignity and a remarkable purity of design. Redwood is used throughout, the unequaled delicacy of its color being taken as the keynote for the coloring of the house, and to it everything blends in an unerring harmony of tone.

The best results are always gained



HALL OF DR. COCKRAN'S HOUSE

where there is no crowding of detail; open floors and occasional plain wall spaces do not bring bareness where the proportions are good, the colors rich and the materials well handled; on the contrary, they give an atmosphere of space and rest even to a small room.

Another house perfectly at home in its surroundings, and strongly suggestive of Germany, is that of Dr. Guy Cockran on Loma Drive, in Los Angeles. While charmingly homelike from the entrance, it turns its more dignified



THE LIVING-ROOM OF "REDWOOD LODGE"



View showing Enclosing of the Patio by means of a Pergola
MR. ARTHUR J. EDDY'S BUNGALOW IN PASADENA



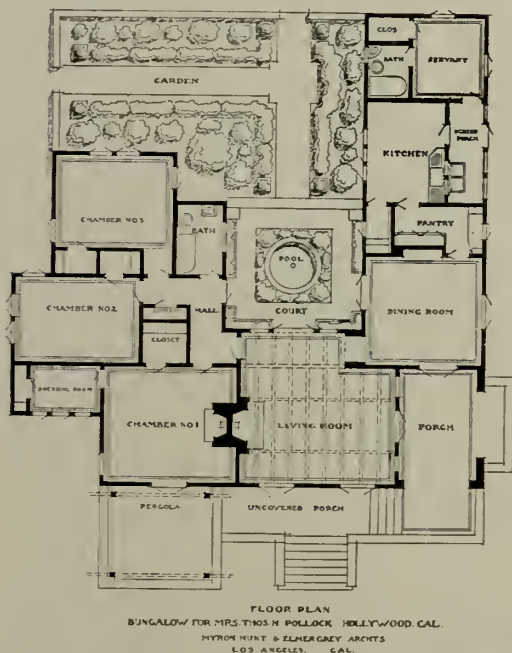
View in the Patio of Mr. Eddy's Bungalow

front away from the street into its beautiful garden enclosed by shrubbery and a long shady pergola, where, in the center of an open lawn, are a sundial and lily ponds.

The oddest houses in California are the bungalows, modeled after the adobe ranch houses the Spanish built in the olden days, when they colonized the Southwest. They are always one-story, low, long and simple, their sunny rooms all opening upon a secluded courtyard that is the prettiest place imaginable, filled with semi-tropi-



MRS. THOMAS H. POLLOCK'S BUNGALOW ON THE FOOTHILLS



cal plants and flowers, and invariably containing a fountain with goldfish and pond lilies.

These houses are either built of white cement with red tile roofs,

Japan. The colors, too, are carefully chosen, one color scheme often being used for the entire bungalow,—a soft green stain for the outside with a lighter tone of the same color for all the inside woodwork, a frieze of tan burlap, dark red brick fireplaces and touches of bright yellow in the curtains and cushions, just four blending colors everywhere through the house, repeating so quietly the tones of the surrounding hills and trees and those of the plants and brick pavement in the Court.

The floor plan of Mrs. Thomas H. Pollock's bungalow at Hollywood, which is here reproduced, is less rambling than those of most bungalows, and was chosen because, while showing the good features of the style, it is yet so compact that it may well suggest possibilities for a summer

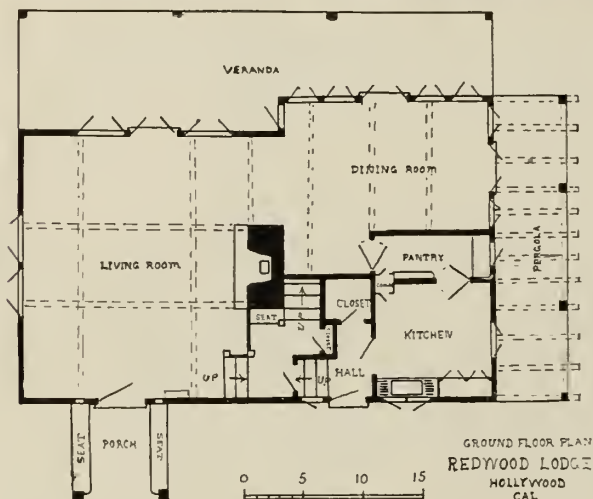
to resemble closely the old "adobes," a perfect illustration of which is Mr. Arthur J. Eddy's in Pasadena, or they are built of wood, with rough "shakes" and unplanned lumber outside and paneled walls and ceilings within. In either case the main idea is that of rustic simplicity in accordance with which the European styles of furniture and decoration are done away with and only those of the West find acceptance, such as hand-made furniture, Indian pottery and baskets, Navajo blankets or Oriental rugs and the vases and hangings of



EXTERIOR OF "REDWOOD LODGE"



A BUNGALOW PATIO

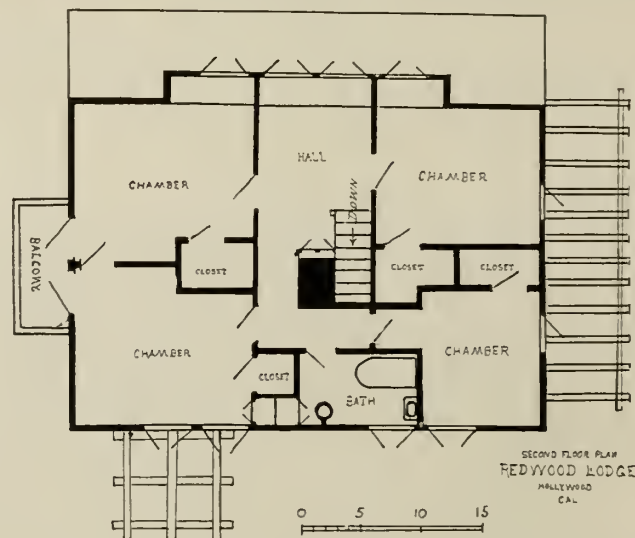


home in any country place. A brook, whose banks are crowded with sycamores and willows, passes through the garden, partially encircling the house, which is approached by a rustic bridge.

Bungalows are growing in popularity, not only because of the pretty informal way in which they combine the healthful out-of-doors with the snug in-doors, but because, being on one floor and simple in appointments, they are so easily cared for. Placing the dining-room, kitchen and servant's room in a separate wing is also an advantage, as it eliminates all disagreeable smells and noises from the living-rooms of the house.

"Redwood Lodge," designed in still another style, is a marvelous little house; it was built for a "lark," a place to have a good time in, where its owner spends two months out of every year enjoying the sunshine and out-of-doors of Cali-

fornia, in place of the bleak winter of Illinois. It is made, as its name implies, entirely of redwood and was planned and built by a clever Eastern woman without the aid of an architect. The decoration of the exterior is achieved by leaving the framework exposed; the sheltering eaves, casement windows and the little garden full of bright flowers add to the rustic effect and make one wonder if an English wayside cottage of Elizabethan days might not have looked just so. The same clever woman designed the furniture, the simple lines of which are so admirably appropriate, and for a pastime she made some of it



herself, her handiwork rivaling that of a skilled craftsman. Nothing could be more homelike and cozy than the living-room, where the warm, natural color of the wood blends with the brick of the chimney place and the gay Navajo rugs. There could hardly be a better plan for a holiday house at the mountains or seashore, where it is desirable to make the housework as easy as possible. The overhanging second floor provides space for four good bedrooms, an unusual number in so small a house. It is a real pleasure to go into the trellised porch after a passing shower has brought out the rich color of the redwood and filled the freshened air with its spicy odor, together with the sweet scent of rain-washed roses, and in answer to the clang of the knocker, to be made welcome by the hospitable wood fire. Even

the casual visitor feels at home in the cosy room, which it were easy to believe is a hundred years old instead of one; and sitting there it is delight-

ful to look out through the glass doors into the deep veranda and across the wide valley, to the distant Pacific gleaming in the rays of the setting sun.

The Indoors and Out Series of Architectural Novelties

I.—A Bungalow Made of an Old Windmill

A PICTURESQUE LANDMARK PRESERVED AND ENLARGED INTO A COMFORTABLE HABITATION

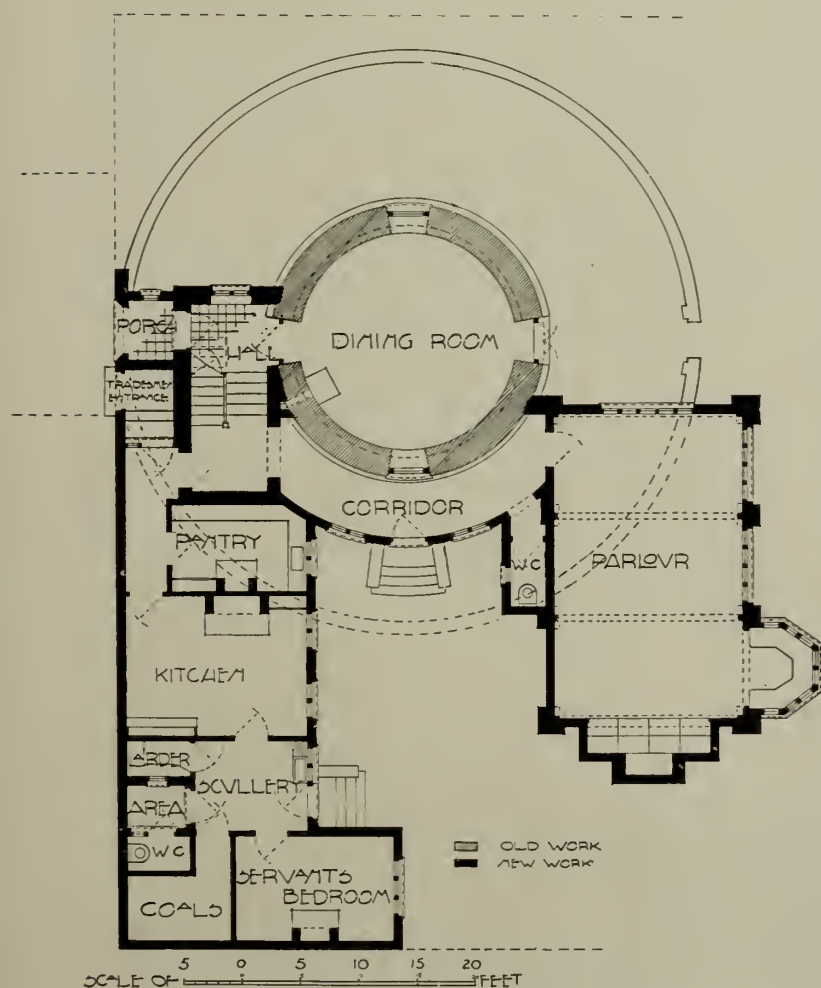
BY EDWARD W. GREGORY

AS a picturesque feature in the landscape few buildings equal a windmill, yet it would hardly occur to most people to turn one into a bungalow, even should the opportunity occur. Yet at Aldeburgh, England, Father Black, a well-known ecclesiastic, bethought him of the idea, and after purchasing an old windmill for a nominal price, employed Mr. R. A. Briggs, F. R. I. B. A., of London, to utilize it in designing the house of which we give photographic views and a

plan. It will be seen that two wings have been thrown out from the old structure which occupies the center, and a small court enclosed. The difficulty of approach to these wings has been overcome by the construction of a corridor, the outer wall of which follows the same curve as that of the walls of the old mill. An enclosing wall still further serves to harmonize the general plan. The mill itself contains a circular dining-room on the ground floor and three circular bedrooms above, getting smaller as they approach the domed roof, where a cozy smoking-room, with deep fixed lounge all round, opens on to the loftily situated balcony, which formerly carried the wind indicator. Needless to say, the great sails have vanished entirely. With the best of good-will they could hardly be retained for any useful purpose.

All the rooms in the old mill are now approached from the specially constructed staircase wing, which has been built high enough to afford an entrance even to the dome. Obviously, it would have been in the highest degree inconvenient to retain the system of getting from one room to another by steps inside the circular rooms, for privacy would have been impossible.

The kitchen and servants' quarters of this unique bungalow are by themselves in the wing behind the staircase. They are easily accessible for service to the dining-room and entrance hall, and are roomy and comfortable. The parlor occupies the whole of one wing. It is a broad, roomy apartment with open beamed roof, and is approached from the end of the curved corridor. A feature of this room is the polygonal bay, thrown out to command sea views from one corner. A seat runs all round the bay, under the casements, and other seats are fixed in the ingle-



PLAN SHOWING NEW AND OLD WORK

nook. The chimney-piece is constructed of red facing bricks, and the woodwork of seats, etc., is inlaid with diaperings of ebony and pewter.

Originally the old mill was constructed of red brick cemented over, and this method of construction has been carried out in all the new work, with the exception that roughcast has taken the place of cement. The thickness of the masonry of the circular part reaches as much as two feet six inches. As a consequence, the windows have deep ledges, and of course they slope with the splay of the walls. White paint has been used on the window frames and a contrast obtained by painting the shutters bright green.

The parlor is, of course, the lightest and roomiest apartment in the house. It is provided with a very large area of window space, and its open roof gives air and spaciousness. The dining-room has two approaches, one from the hall and the other by means of glazed doors, from the semi-circular garden. Flights of steps give access

to the partially enclosed court. No doubt there are any number of old buildings of character which, treated with sympathy and common sense, would make interesting bungalows and country houses for those who have the courage to put their ideas into execution.

It is really a remarkable achievement to have made the old mill group so well in its present position. There is certainly no house like this Suffolk bungalow in the world, yet, for some reason or other, the whole building, though quaint, does not appear *outré*. The additions seem to have grown there without effort and the house is convenient and comfortable to live in. The scene of merry and comfortable life within and about its walls, the bold exterior rises as a landmark for those on shore and those who sail the North Sea. If picturesqueness is a character that should be given primarily to a bungalow, surely "The Mill" at Aldeburgh is, in this respect at least, a happy example of that most unconventional type of structure.



THE WINDMILL STRIPPED OF ITS SAILS AND TURNED INTO A BUNGALOW



"THE MILL," ALDEBURGH

A View looking into the Small Courtyard. Servants' Quarters and Offices on the Left, Parlor Wing at the Right

See Preceding Pages

A Green Garden

"A GREEN GARDEN" is a garden composed of lawns, hedges and shrubs, and in which vari-colored flowers play little or no part. It is distinctly the most suitable method of planting the formal garden because the evergreen hedges and shrubs are rigid and dignified, the formal effect they produce lasts almost through the year and is found to consort well with architectural surroundings.

Such a garden is shown by the illustrations on the following two pages. A rectangular space is carved out of the natural surface of the land and a level plane obtained by means of retaining walls, which are now almost hid by vines. The system of parterres is wholly geometric, and all the space, except that occupied by the walks, is devoted to turf, bordered with low hedges of box. The gar-

den has an expansive and open effect, yet it is not only enclosed by its own boundary walls, one of which is surmounted by a pergola, but it is secluded from the public domain by another pergola, many hedges, the stables and other minor structures of the estate.

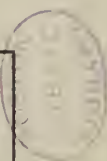
The level of the garden is reached by inclined walks or ramps, and one of these passes through the center of the parterres and on to a tennis court, which makes an appropriate transition between the precise parterres and the undulating fields beyond. Inasmuch as the pleasure felt in beholding a formal garden, when in the midst of its maze of walks and hedges, is often increased by seeing the natural regions outside of it, the openness to the fields in this case serves to enhance by way of contrast the miniature beauty of the garden itself.

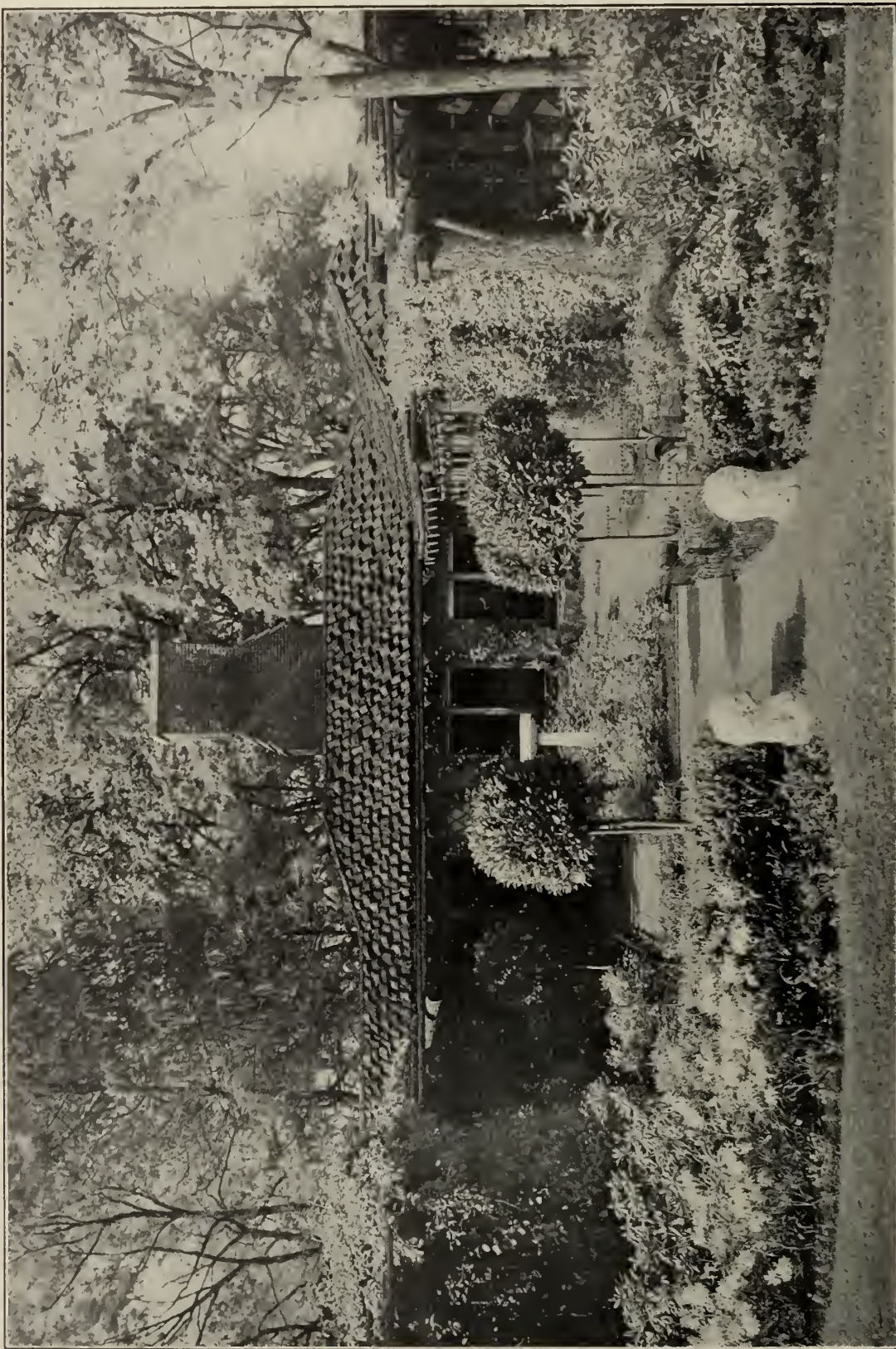


CELEBRATED FORMAL GARDENS OF AMERICA — I
AT THE ESTATE OF E. D. MORGAN, ESQ., NEWPORT, RHODE ISLAND



CELEBRATED FORMAL GARDENS OF AMERICA — I
THE PERGOIA OVERLOOKING THE PARTERRES AT MR. E. D. MORGAN'S ESTATE





"BAY LODGE" ON THE ESTATE OF MRS. DAVID NEVINS
AT METHUEN, MASSACHUSETTS
Stone, Carpenter & Willson, Architects

The Guest Lodge

A NEW TYPE OF STRUCTURE INVALUABLE UPON THE COUNTRY ESTATE

To entertain friends, to give them space and other facilities for their comfort and amusement, and to avoid in one's own household the confusion, labor, crowding or care that the presence of visitors often involves : these are the main purposes of the *Guest Lodge*

A HAPPY season at the country home is shown by the guest-book. The number of persons entertained nearly measures the summer's gaiety, for the country place needs visitors in order to express the fulness of hospitality as it can be expressed nowhere else.

Unfortunate it is that country life is daily becoming more and more strenuous, that it is threatened with the vehemence of the town. The man who would seek rural "retirement" has now become a helmsman of hospitality.

In looking for causes of this complication of living, the most important is found to be the frequent accession of visitors. However willingly the country hostess invites them, they are her chief anxiety and care. Nor is she selfish in this.

Her concern is a dual one. How to make them happy and comfortable and yet retain what the artist in hospitality must retain, her own poise and the tranquility of her household ; this is her problem. To give them the freedom of the house is costly in the work of preparation and the adjustment of things after the departure. Nor is it always the most agreeable for the guest. A satisfactory solution of the difficulty is to have a *guest lodge*.

A friend of the writer turned a disused barn on his estate into a house for his friends. About fifty yards distant from the main house it lay, and was reached by a rose-bordered walk through the garden. The ground floor was given up to storage, and above, at one end, was a living-room reached by a central corridor, upon which opened



THE LIVING OR TEA ROOM OF "BAY LODGE"



THE LODGE SEEN FROM THE MANSION AT THE SUMMIT OF THE LAWN



"BAY LODGE" FROM THE VILLAGE STREET

a bathroom and half a dozen guest-rooms. The finish was of inexpensive varnished boards, the furnishings of bungalow style. A week-end party of men visitors would alternate with a party of girl friends in taking possession of this guest-house, and all who came found comfort there and the satisfaction of knowing they were not discommoding the household of their host.

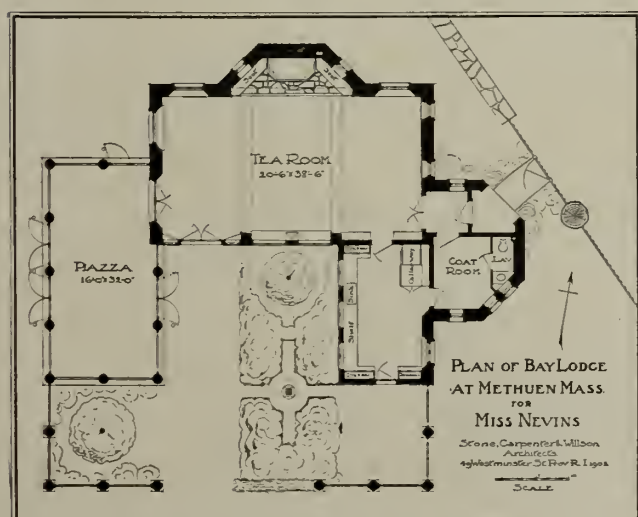
Another sort of guest lodge is the one illustrated here. It has no bedrooms for over-night guests, its purpose being to provide for the entertainment of large numbers during the day or evening only. Located as it is at the boundary of a large estate in New



THE COMPLETELY EQUIPPED KITCHEN



ELEVATIONS DRAWN BY THE ARCHITECT



THE PLAN OF THE SINGLE FLOOR

England, two roads from the nearby village meet before the door, and here do many neighbors congregate for entertainments held in "Bay Lodge," as the charming little structure is called.

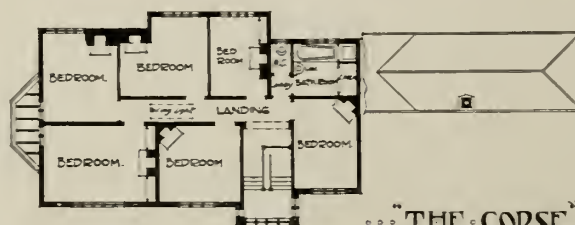
A large living or tea room with capacious ingle-nook is the cozy setting for many a winter gathering, and in summer broad windows command a view of a delightful little formal garden. A large piazza, the more open to breezes in being almost detached from the building, also has a view of the garden on one side, and on the other a broad sweep of lawn descending to a wooded vale. A coatroom and lavatory and a completely equipped kitchen with cellar underneath provide every means for entertaining few or many, and without confusion. Rubble masonry, in which very large and very small stones are used, and bark shingles on a low-pitched roof, whose rafters project and support vines along the eaves, give a genuinely rustic effect. The pergola, and other outlying woodwork, is of rough timber bearing the bark. The large chimney denotes a hospitable hearth within. When it is realized to what varied uses such a building can be satisfactorily put, and without disturbing the tranquillity of the homestead a few hundred yards distant at the head of the lawn, the reader will probably think of other estates to which a guest lodge would be an invaluable addition.



A Modern English Dwelling-House

GARDEN FRONT OF
"THE COPSE"
AT SHACKLEFORD

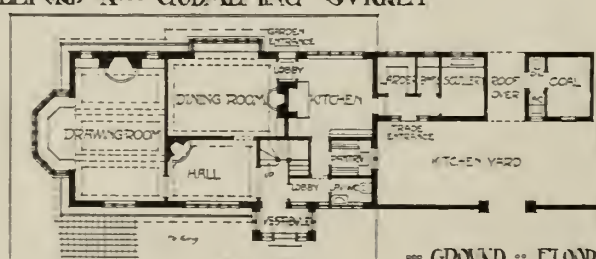
HUBBARD & MOORE, ARCHITECTS



PLAN OF
FIRST FLOOR

"THE COPSE"
SHACKLEFORD

"THE COPSE"
SHACKLEFORD NEAR GODALMING, SURREY



GROUND FLOOR
PLAN

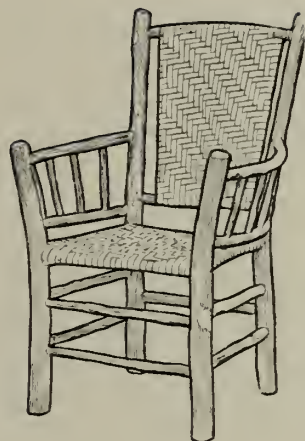
HUBBARD & MOORE
ARCHITECTS

A LIVABLE house with livable grounds. Each room distinctly separated from another, thus giving privacy and repose in indoor life, but at a cost of additional foot-steps. Convenient service wing, enclosed by a kitchen yard, set apart from the rest of the grounds. Half-timbered overhanging portion increases the space on the first (second) floor. Roof, reaching low in places and unbroken except by sturdy chimneys, gracefully surmounts and protects the home. The cost of the house, built of brick, and plastered, would be about \$10,000.

How to Furnish a Bungalow—IV

Buying the Furniture

BY FLORENCE FINCH KELLY



BEFORE buying furniture for the bungalow, or even before deciding what one wants to buy, it is advisable to

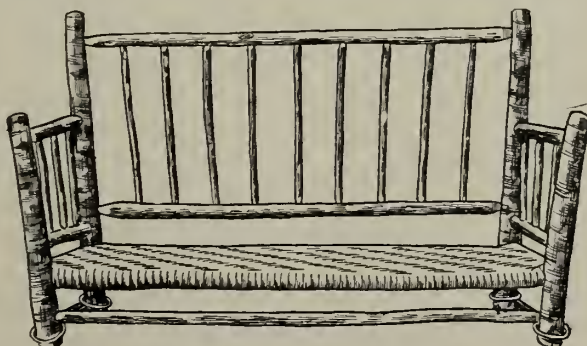
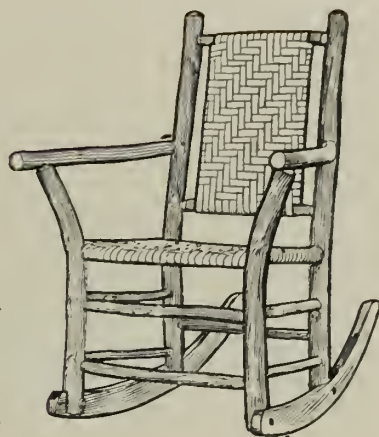
make a pretty thorough investigation of what the shops have to offer. And it is a good plan to visit a great variety of shops, little and big, for there is always the possibility of finding, in some obscure little place, an odd piece that will just fit into the place for which it is wanted. Such a tour also will give one many ideas about the production of unique effects and the securing of comfort and convenience. There is such a great variety in the styles, qualities and prices of furniture suitable for bungalow use that one needs to know the field pretty well and to have a very definite idea as to what one wants to buy before starting out to make purchases.

There is rather a fad this year for the rough birch furniture, in which one can find nearly all the ordinary articles of daily use. But notwithstanding the fad it costs considerably less than does any of the furniture whose material has gone through the usual processes. It is made of the limbs and straight, slender trunks of the yellow birch in their natural state. The beautiful, yellowish gray coloring and satiny surface of the bark of this most beautiful of the trees give it a peculiar attractiveness. It is always suitable for porch furnishing, and if it is desired to give a sort of rough-and-ready aspect, a touch of the unconventional or of the bizarre to the house or to a single room, it is, especially for bungalows in the woods, at once pleasing and appropriate. A large, round table, for dining-room, library or porch, with a top of polished birchwood, costs twelve dollars, the prices for

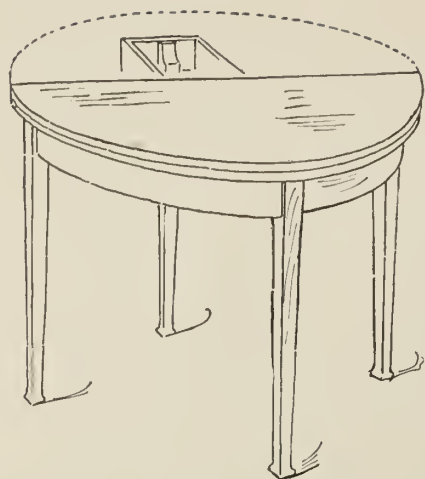
smaller ones sliding down to five dollars, according to size. A Morris chair made entirely of small

limbs, even to the pegs holding in place the birch support for the back, sells for six dollars. Rockers, straight chairs, armchairs and chairs for children vary from this price down to two dollars. A hat tree is two and a half dollars. A bedstead, costing twelve dollars, is very suggestive of life in the greenwood, and of the make-shifts of pioneering. But it is all in the looks, for the spring and hair mattresses for which it makes provision promise all the sleeping comfort that civilization has made possible. There are settles also that vary in price, according to size, from three to nine dollars.

Reed and willow furniture is always pretty and appropriate for the bungalow, wherever it may be or whatever its style. The lightness of its material and the ease with which it can be handled make it desirable; it is easily kept clean; it is comfortable and convenient, and the airiness of appearance it gives to a summer room is very attractive. It can be bought in a great variety of colors, styles and prices. For bedrooms and living-rooms it comes in white and colored enamels and stains which one can order by sample and match or contrast with walls and draperies. Upholstered and cushioned with flowered chintz or cretonne with white ground and flowers, carrying out the color of the enamel, the effect is very pleasing. Chairs cost from five to twenty dollars each, according to size and elaborateness of style. Lounges, sofas and settees are from eight to twenty dollars. Tables vary in price within about the same limits.

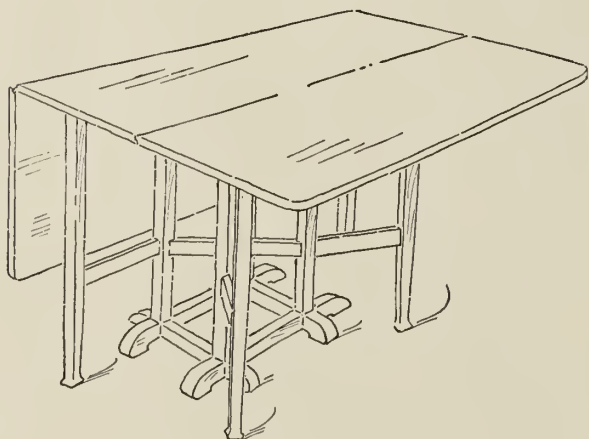


A SEAT OF RUSTIC HICKORY
To be suspended by chains

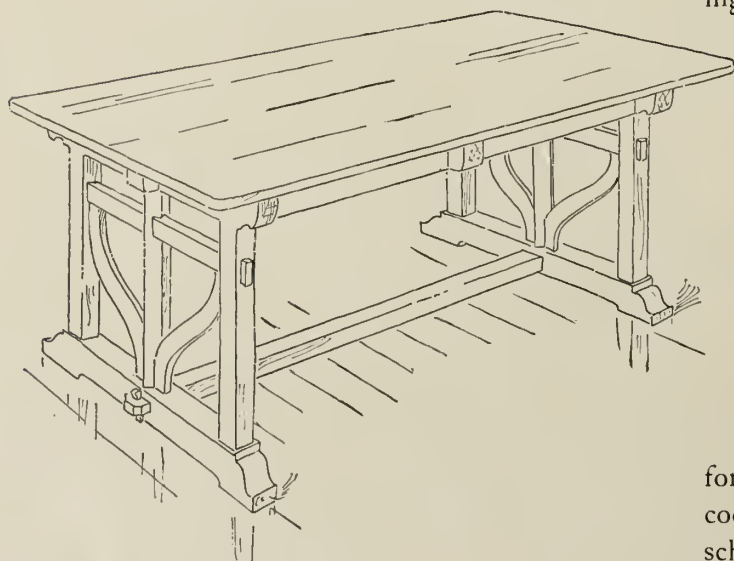


A FOLDING WALL CARD-TABLE

For porch and lawn use there are wooden benches, seating four people, for six dollars, and folding chairs of painted wood at from one to three dollars. Rustic hickory is attractive in various forms, as can be seen from the accompanying illustrations loaned by the Old Hickory Chair Company. At from three to five dollars each there is a variety of plain and serviceable chairs, useful for porch, hall or living-room, with maple



A DROP-LEAF BREAKFAST TABLE



THE "BANK OF ENGLAND" TABLE

or fumed or green oak frames and cane seats and backs. Weatherproof willow armchairs, roomy and comfortable, made on the simplest lines, in the natural color cost five dollars, with two or three dollars extra if cushions are desired.

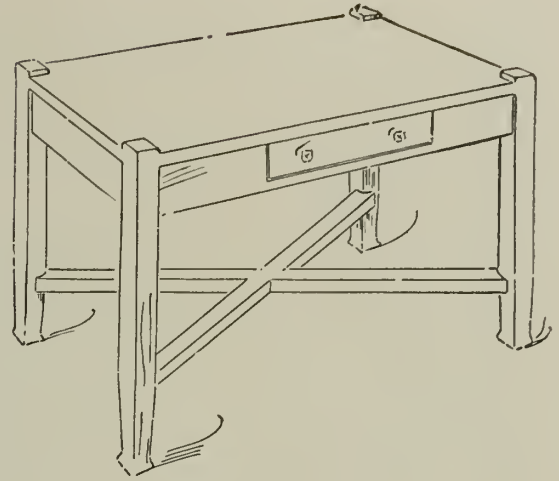
A variety of unique articles can be had in willow ware. There are willow wood-baskets that cost two and a half dollars in natural color, but more if stained. The Tilbury tea cart, for serving tea or refreshments on the porch or the lawn, is a unique bit of mechanism in willow. It runs on two castored legs and two wheels, has shelves across the lower part for refuse bowls, and a glass tray on the top for serving. The wheels have rubber tires, and the castors are on ball bearings, so that it obeys the directing hand easily and quickly. It costs twenty-five dollars in the natural color, and three and a half more for staining to order. A willow muffin rack or stand, with four shelves, for serving muffins, sandwiches, toast, at afternoon tea, or at the bedside, costs six dollars in the forest green stain. Large willow trays, with three coasters in the center for holding bottles, are six dollars each. At the shop of Mr. Joseph P. McHugh, to whom we are indebted for some of our illustrations, they have paid special attention to the staining of willow furniture, and they produce some very beautiful and artistic effects. A table stained first with a mahogany coloring, overlaid with a gray, and then wiped down, shows a beautiful dull soft glow that, like wine, improves with age. For wherever it is rubbed, instead of marring, it merely shows a high light. The firm has experimented very successfully in the staining of willow to make it match mahogany furniture. A large lounging-chair, costing sixteen dollars, stained with gold and overlaid with two tones of green, and then wiped down, has a dull metallic luster and changeable coloring. Another in green and red has the same changeable effect, varying in color as the light strikes it. A table in deep brown overlaid with Paris green stain makes a striking piece of porch furniture.

White enamel furniture is always attractive for the summer bedroom, for it always looks cool and clean, and it always harmonizes with any scheme of color in walls and draperies, and accents the beauty of the coloring whether it be

rich or delicate. Chiffoniers with mirrors and five drawers cost from eighteen to thirty-five dollars. Bureaus come within the same limits. Toilet tables with large, square mirrors and one or two drawers cost fifteen dollars. A pretty magazine stand and book-rack is twenty-dollars, and straight chairs and low rockers with cane seats and backs are from two to eight dollars. White enameled iron bedsteads vary from three to eighteen dollars, while brass bedsteads range between twenty and a hundred dollars. The brass bedsteads require some care or they will soon tarnish, especially in damp weather. But if they are rubbed with a soft, dry cloth twice a week they will look as well as new for years. The white enamel beds need to be washed every now and then. And if they are marred or grow dingy beyond the help of water and cloth the family factotum, who is usually a feature of country life, or the handy member of the household, can give them a fresh coat of enamel. If one wants a very imposing edifice in which to abet and shelter his slumbers there are massive four-poster Mission bedsteads curtained all around with Aberdeen linen. They cost from \$150 to \$200, completely furnished with mattresses, bolsters and pillows.

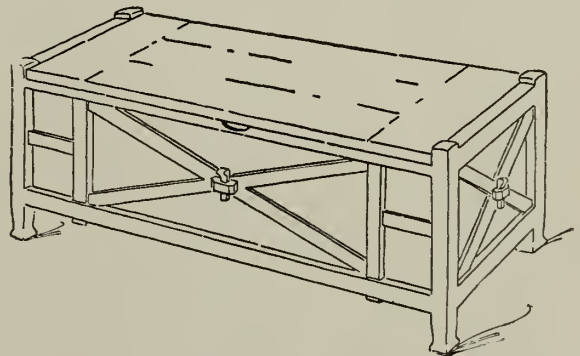
There are many who hold that the Mission is the only furniture worth thinking of for the bungalow. The exigencies of life and the demands of taste have modified its lines and its weight a good deal, and for most bungalows, unless their rooms are exceedingly large, these slender, lighter articles are much more appropriate. The prices vary a good deal, partly according to the shop in which they are bought, but mainly according to the care and honesty with which they are made and finished. The handmade articles, solidly built, put together without artifice, and carefully finished cost from a third to a half more than those that are machine made and fastened together with glue. But they will last many times as long, and will never be anything but solid, substantial and satisfactory. The prices quoted below are all of the best class of Mission make. But it must be remembered that if one wishes to buy the cheaper, machine-made goods it is possible to get them, or, at least, all of the ordinary lines of furniture, at prices averaging about one-third less than these.

A round or six-sided table for living-room, library or dining-room of fumed oak or green



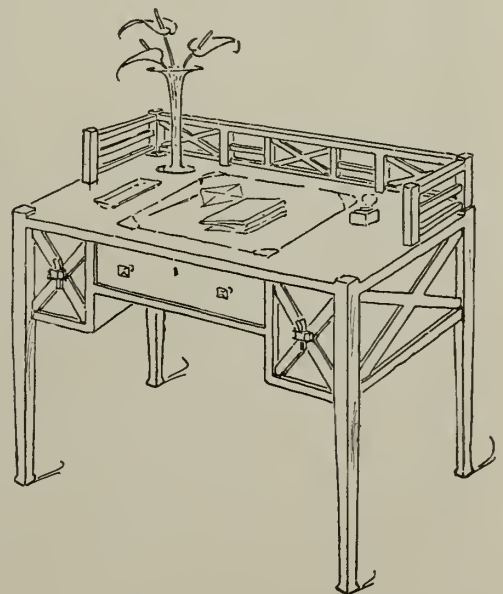
A WALL TABLE

oak costs from fifteen to fifty dollars. A dining-room suite, consisting of table, four chairs, buffet and sideboard, in gray finished oak, that is very pleasing, can be had for \$120. It is made on curving rather than straight lines and there are claw feet. A settle, very large and deep and roomy, offering the acme of comfort and artistic simplicity, upholstered with leather and piled with leather cushions, sells for from sixty to ninety dollars.

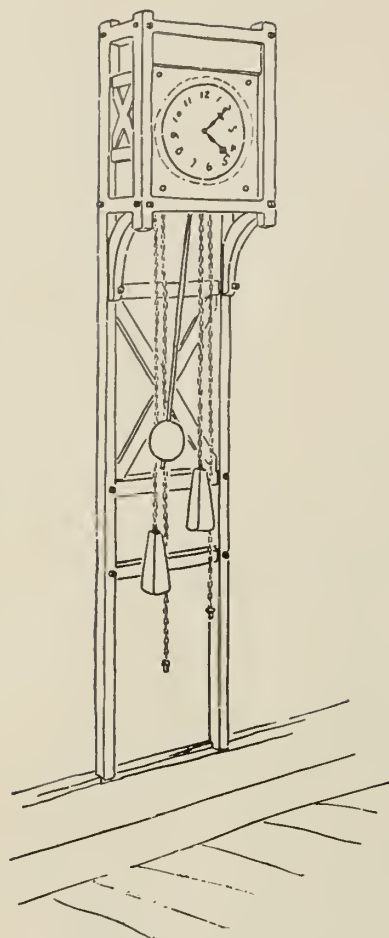


A MISSION CHEST

Rockers and armchairs are from eight to twenty-five dollars. A siesta chair at twenty-five dollars, with wide arms and a double runner of Morris filling, fairly woos to an afternoon nap on the porch or by



A DESK FOR THE BUNGALOW

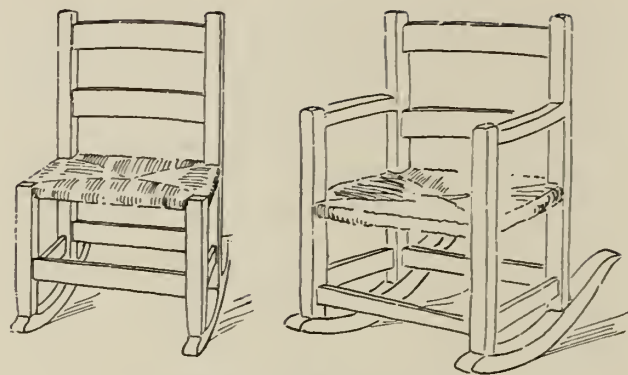


A WALL CLOCK
With Brass Dial

open window. The table settle, at fifty dollars, in the four-foot length, in green oak, is a unique bit of furniture. It has a high, straight back, which can be turned down across the arms to make a table. The combination unity bookcase and desk make a convenient piece of furniture for the bungalow library or den. Both desk and bookcase are in sections, and can be put together separately or in combination as one likes. In six sections, four of the bookcase and two of the desk, in the forest green finish, it costs fifty-six dollars. More sections can be bought if desired.

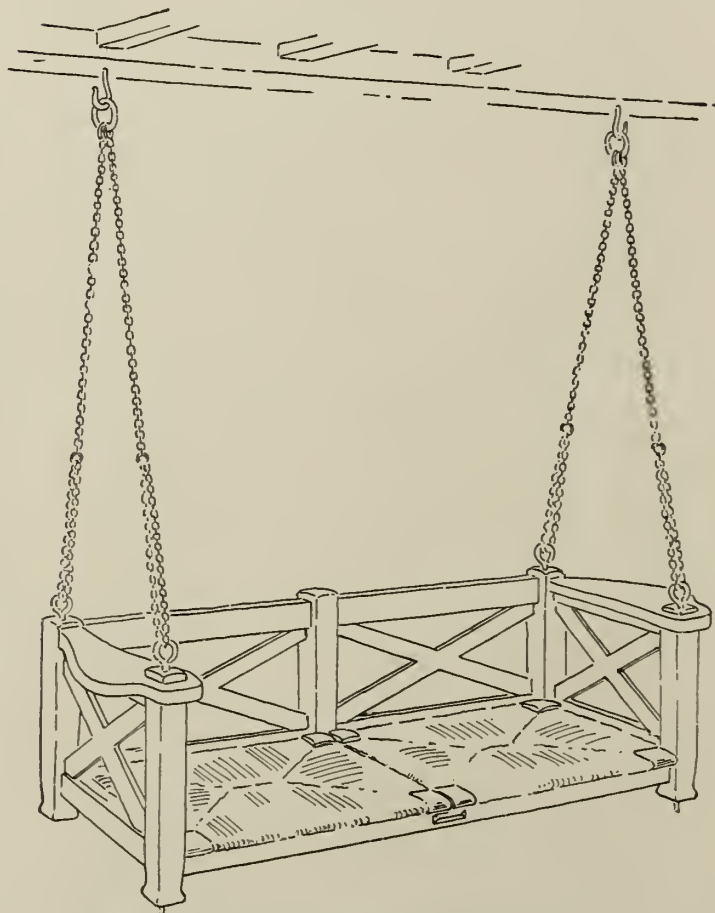
There are commodes for the bedroom, chafing-dish stands for the dining-room, and various other pieces of furniture, that are made to conceal a strong box, burglar and fireproof. They cost from forty to eighty dollars.

The belfry, either standing or hanging, is an attractive feature for the porch or the hall. It has a thatched roof, open sides, a pigskin pull, and hanging in the top a glorified cowbell. The standing sort has the lower part fitted up for rubbers, umbrellas and golf sticks. It costs from eighteen to thirty dollars. The Whitney writing table, at eighteen dollars in the forest green finish, is very suitable for the guest-room or a young girl's room, where it is not necessary to provide for the filing away of papers. It has a drawer and at each end a shelf which slides in and out. Very useful also is the thread-and-needle-table, at sixteen dollars, in a soft gray finish. It is a low, solid table with a drawer at each side. The bedside table at the same price has two shelves or tables that project from a standard and can be laid flat against it or opened out like a leaf table. Pottery shelves, open all round, and grooved for plates, cost seven and a



"NORTH CAMP" ROCKERS

half dollars for two shelves. A clothes strip, with five pegs, each driven through the oak back, costs five dollars. An upright clothes-tree with eight pegs is fifteen dollars. An umbrella-stand in bent wood, with a very lifelike-looking snake coiled in a high spiral to make the body of the stand, is fifteen dollars. An odd design for a waste basket carries out the Mission idea harmoniously in even this small feature. The sticks forming the sides are driven through the oak board bottom and it is then lined with buckram.



A BROAD-ARM SWING SEAT
In the Mission Style with Seats of Rush

Cement and Concrete for Architectural Ornament

THE MANY ADVANTAGES OF THIS NEWEST OF OLD MATERIALS

By SAMUEL SWIFT

ASK a dozen intelligent men and women what they admire most in a fine house and what answers will you get? Probably nine out of the twelve will specify some ornamental detail rather than anything more directly a function of the main design.

A carved screen, a handsome stairway, is easier to understand, easier to remember, than the subtle beauty of a well-proportioned room or the touch of genius in the arrangement of door and window openings in a façade. This popular preference for decoration over structure is venerable, and it extends to all the arts. And, as in architecture a very large influence is wielded by the non-professional client, any new thing extending the range or lessening the cost of decorative effects must be of general and not merely special interest.

Cement and its derivative, concrete, are precisely such new factors in architectural ornament. So recent, indeed, has been the wholesale adoption of these materials for general building purposes, that architects have often found themselves, willy-nilly, turned into contracting engineers to meet the new demands.

For them, the smaller uses of cement have had to wait until experience could be gained in the larger operations. Walls and floors, columns, beams and stairways have greatly occupied designers and builders. Yet there has been, already, successful adornment of the inside and outside of buildings with cement products. Mantels, fireplaces, chimneys, friezes,



DECORATIVE PANEL OF GRANITE COMPOSITE

balustrades, doorways, moldings, and many other details have been carried out in these substances, and their use for such purposes is quickly spreading. In and about New York, in New England, in Pennsylvania, and especially in the Middle West, new applications of them are growing rapidly more numerous.

Stone is especially challenged by cement and concrete, but iron, bronze, lead, brick, wood, and particularly terra cotta, are also in the domain of its rivalry. The claim is made for concrete

that it is as strong as stone because, after properly set, it becomes stone. It is as waterproof as any stone can be — even granite is porous; the roof of Grant's tomb in New York had to be treated not long ago with a waterproofing compound, and it is known that water will strike through a twelve-inch brick wall in three hours. In architectural ornament, as elsewhere, cement shows high resisting power against fire.

But the mere quasi-novelty of a material (for cement is at least as old as the ancient Romans, who used *pozzuolana*, a natural volcanic stone



ORNAMENTAL AREA WALLS OF CONCRETE TO THE PARK AVENUE TUNNEL IN NEW YORK
Where Steam has now been abandoned for Electricity

cement, for structures that have withstood twenty centuries) is not enough to justify its employment. Is cement better, for architectural ornament, than familiar materials, and if so, why, and under what conditions?

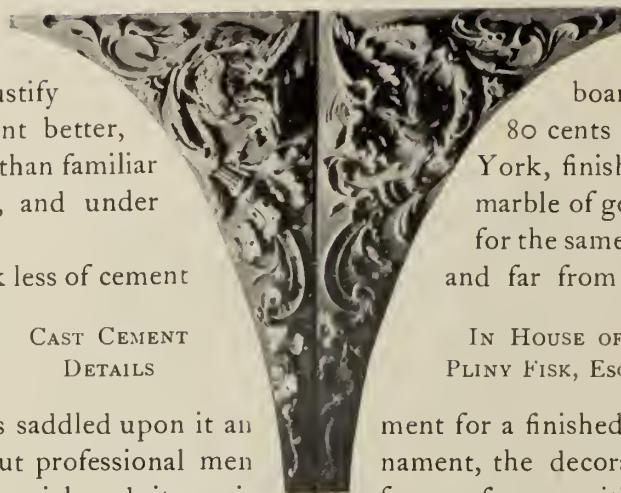
Let not the reader think less of cement because its first and principal claim is cheapness. Laymen sometimes shy at this word because usage has saddled upon it an implication of inferiority, but professional men distinguish between its essential and its accidental significance. Cheapness, to a designer of buildings, ships or machinery, means less money spent for a certain result, or a larger result obtained for the original sum. The question of merit is separate and apart and, for the moment, let it wait.

The use of cement or concrete for architectural ornament means a saving of forty to sixty per cent of the cost of limestone and of fifty to seventy-five per cent of the cost of marble. If a fixed sum be available, a good deal more ornamenting can be provided in cement than in stone or marble. Often, the lower expense of cement will permit the adornment of buildings which the owners could not otherwise afford to decorate at all.

The relative cost of cement and stone varies in different localities. In New York, Portland cement costs about \$1.50 per barrel. Concrete costs 30 to 35 cents per cubic foot, when cast with plane surfaces, plus a further charge for the lumber used

CAST CEMENT DETAILS

*Cram, Goodhue & Ferguson,
Architects*



for molds, of \$12.00 to \$15.00 a thousand feet, board measure. Limestone costs 80 cents to \$1.00 a cubic foot in New York, finished in plane surfaces, while marble of good quality often costs \$1.50 for the same unit. In cities near quarries and far from cement works, these differences are less marked.

To take advantage of the full cheapness of cement for a finished scheme of architectural ornament, the decoration should include at least four or five repetitions of each unit of design. That is, every mold should be utilized for several castings. Thus, a frieze

ten feet long might be cast in four parts, from one mold two and one-half feet long. In stone, however, the cost of repeating a unit of design is nearly the same as of making it for the first time, the only gain being in the added familiarity of the workman with his task.

Perhaps a quick glance at the actual process that goes on in each case will help explain why cement and concrete are easier and cheaper to deal with than stone. The first stages are the same. From the architect's sketch or drawing, a modeler makes a clay model, full size, of one-half

or one-quarter or less of the design. This is cast in plaster and becomes the working model for the finished decoration. Now mark the divergence. The stone cutter or marble worker laboriously copies the plaster cast with mallet, chisel and often with the soulless steam drill. Every distance must be laid



ORNAMENTAL FINIAL OF CONCRETE STONE UPON A BOSTON APARTMENT HOUSE
C. A. Blackall, Architect



CEMENT ORNAMENTATION IN THE DINING-ROOM OF THE "ALGONQUIN," NEW YORK CITY

off, every angle and elevation measured from the plaster cast.

With stone the heavy part of the work only begins with the actual cutting out of the design on the rough block. But with cement as the final material, the work is already three-quarters finished with the completion of the plaster cast. From this cast is taken a glue or gelatine mold. This flexible substance when backed by a plaster shell retains its shape; yet, after the cement has been poured into it and has hardened, it may be peeled off like a thick glove without breaking.

This mold may be used time after time if due care be taken. The wet cement or concrete is tamped into it and allowed to set before being removed. When it comes out it is finished. The several units resulting from successive castings need only be assembled and put in place.

Granting then, that the material is cheaper, what of its other qualities? Does the word "cement" suggest lusterless dead walls, foundations that have grown dingy? This material has too often been employed without bringing out its best aspects. It has been used as a cheap substitute for stone or brick without much effort to show indi-

vidual character. Even in the current revival there is imitation of stone effects. Some architects deny to cement a distinct idiom of its own. But advanced spirits blame them for still thinking in terms of steel, brick, wood or stone while carrying out the resulting design in cement. It is not fair, they cry, to the material or to the structure concerned. There must be a better knowledge of the capabilities of cement, a truer use of the plastic qualities it possesses in its early stages. Then, these advocates of cement declare, there will be a characteristic and excellent architectural expression in the newer fabric.

However this may be, there is one positive and rather striking advantage of cement for architectural ornament inherent in the material itself. It reproduces the architect's design far more faithfully than the commercial stone cutter's work is likely to do. If the architect were himself also an artisan, making his own clay model of the ornamental parts, there would be no theoretical loss or change whatever in carrying out the design in cement. As it is, the architect must in any case entrust his idea to the molder in clay, whose full size model, however, while still plastic, he may



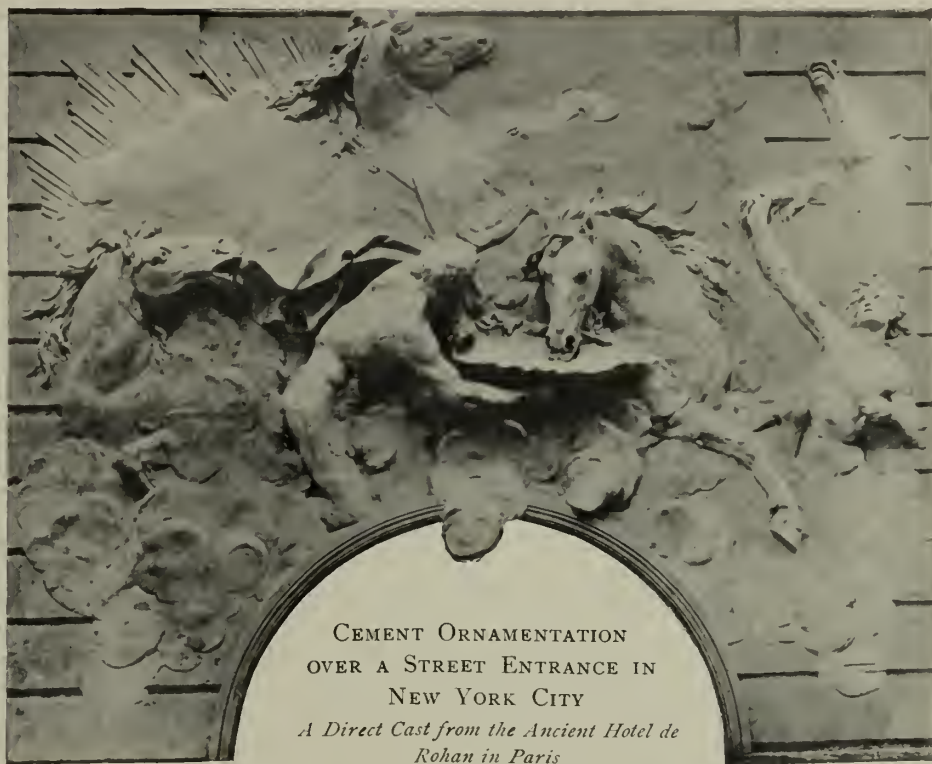
CEMENT ORNAMENTATION IN THE DRAWING-ROOM OF A PRIVATE RESIDENCE



alter until it suits him. Often the architect cannot tell precisely what he wants in a design until a tentative model is made whose proportions or details are subject to change. In very important buildings part of the façade itself is sometimes erected full size, in staff,

so that the whole effect may be more probably known in advance. This was done for the New York Public Library by Messrs. Carrère & Hastings. This is relevant only as showing that the clay model of an architectural ornament may be, and often is, an accurate and real expression of the architect. This granted, it follows that a carefully taken cast in cement may reproduce as nearly as possible what the architect intended. In executing the design in stone, however, the personality of the practitioner, the stone cutter, must intervene between the designer and the finished work. This personality may be one of full artistic sympathy and technical accomplishment; more often it is that of a hired laborer working by the day, a man not worthy to be called an artist. How weak, how empty, how insignificant is much of the stone carving one sees on houses nowadays! While it has the merit of presenting a cut surface instead of the sometimes lifeless texture of the cast, its perfunctory character is depressing.

Cement's first claim to artistic merit, then, is its faithfulness to a given model. But it makes other claims. It is possible, for example, to vary both the texture and the color of concrete for architectural ornament. Diversify the crushed stone added to the cement and you affect markedly the appearance of the hardened concrete. Crushed marble, or stone containing mica, lends



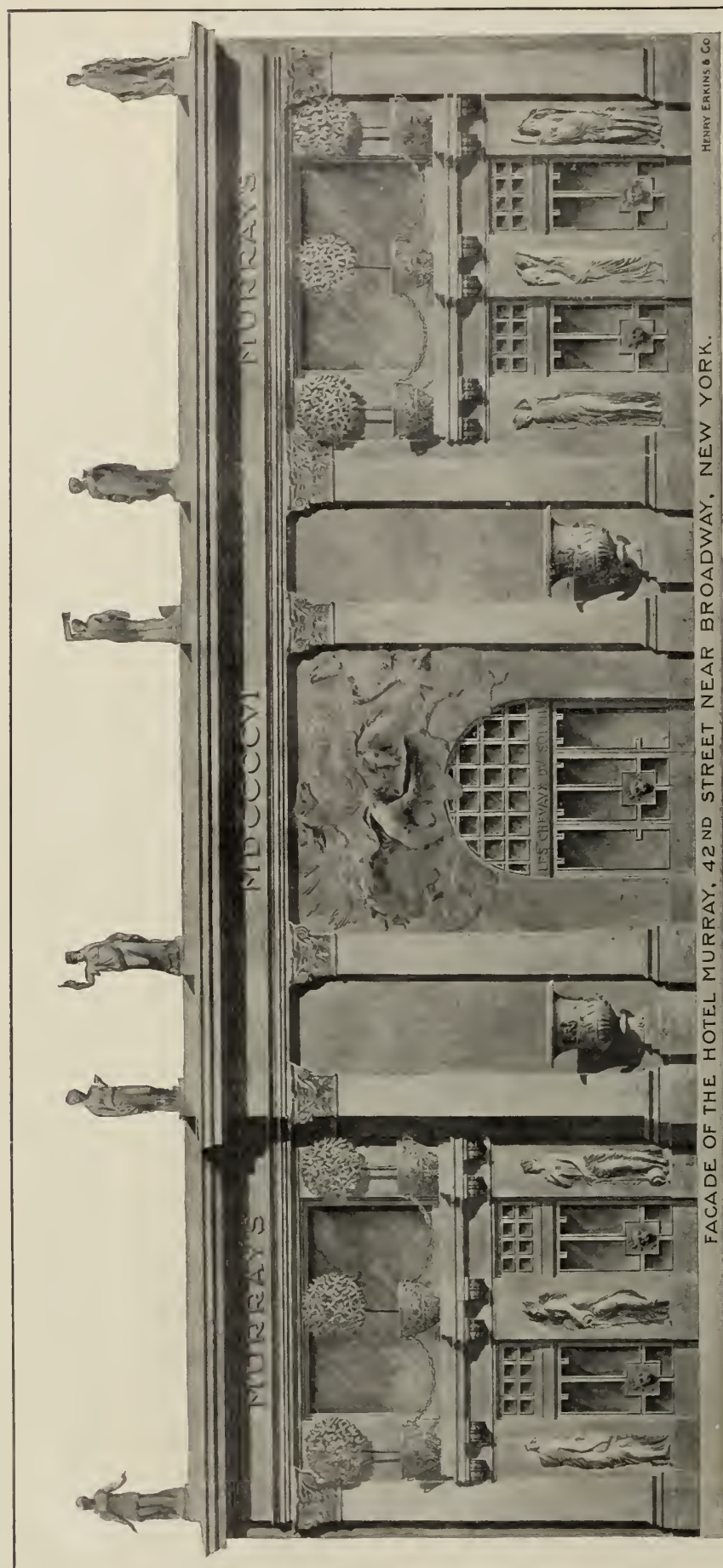
CEMENT ORNAMENTATION
OVER A STREET ENTRANCE IN
NEW YORK CITY
*A Direct Cast from the Ancient Hotel de
Rohan in Paris*

luster and glint to the finished cast. Sand must be kept out of such mixtures. Marble and limestone are the substances that make for good casting or carving properties in concrete. As to color, the natural hue of cement is a soft gray. Except in laboratory ex-

periments, it is not yet possible to get satisfactory light colors in concrete that needs to be strong. The lime already in the mixture kills these hues, unless the coloring matter be used in such quantities as to overcome the lime, thus preventing a perfect set or hardening, and impairing the strength of the concrete. Occasionally, this sacrifice may be worth making, in places where there will be no appreciable strain upon the finished ornament. Blue, brown, red, are easier colors to get, without weakening the concrete. Experiments are constantly being made all over the country to increase the range of effective color and to add variety to the texture of concrete.

Cement itself is the true coloring matter of concrete up to certain limits. Practical men report that one part of cement mixed with two parts of crushed stone or sand will give very nearly the color of the pure cement, irrespective of the color of the added material. But when the cement is but one-fourth or one-fifth of the mixture, the stone gives the dominant note of color to the resulting concrete.

To vary the texture after casting, the surface may be roughened by hammering, as with stone, or before the concrete has fully set, the face may be scraped. If quite soft, it may be scratched with a stiff scrubbing brush to expose the crushed



A METROPOLITAN FAÇADE OF CONCRETE STONE

By the use of cement combined in various ways with crushed stone of numerous kinds and of varying degrees of coarseness, exquisite details of antique architecture can be reproduced, and, if skillfully combined, will produce a very successful architectural composition. Or an entirely new design may be executed from a modern architect's sketch or models.

"The use of cement or concrete for architectural ornament means a saving of forty to sixty per cent of the cost of limestone and of fifty to seventy-five per cent of the cost of marble. If a fixed sum be available, a good deal more ornament can be provided in cement than in stone or marble. Often the lower expense of cement will permit the adornment of buildings which the owners could not otherwise afford to decorate at all."

The coloring of concrete stone is a field comparatively unexplored and undoubtedly productive of beautiful results. There are already on the market several preparations for the waterproofing of concrete.



STAIRWAY OF A COMPOSITION OF KEENE CEMENT
In Residence of W. L. Stowe, Esq., Roslyn, L. I.
John Russell Pope, Architect



HALL OF CONCRETE STONE
In Residence of Amory S. Carhart, Esq., Tuxedo, N. Y.
Trowbridge & Livingston, Architects

stone particles, whose myriad reflections of points of light give a brilliant and responsive character to the material.

A happy use of the plastic qualities of cement has been made in reproducing old masterpieces of ornament, architectural or sculptural. European museums and civic authorities have been liberal, with proper precautions, in granting permission to make direct molds from treasured originals. From these, casts in cement derivatives are made, often of far higher artistic excellence than dubious reproductions turned out by cheap Italian sculptors and stone cutters.

Much of the lovable quality of antique or Renaissance ornament, as in any other art, lies in the human divergences from absolute accuracy of line or modeling. Besides these unintentional but delightful irregularities of master craftsmen, one likes to note the signs of wear, the marks of long usage, the healed scars of time and service. No stone cutter can reconstruct, in his marble or Caen stone, either of these elusive beauties. The individuality, the intangible, authentic note of the creative artist cannot be copied. Nor is it easier to represent, in a few strokes hewn out

yesterday, the attrition due to immemorial human contact. But a carefully taken cast keeps a good share of these precious qualities of an original. Facsimile is hardly too strong a word to apply to the best of these cement casts—they are truer than plaster casts because they are in a material almost the same, in many cases, as that of the ornament they have reproduced.

From the use to which some of these excellent casts have already been put, however, it is worth while to sound a note of warning. If mantels, pillars, or friezes from the old world may be bought like ready made clothing, their purchase and application should receive at least as much thought. The ordinary man, when he buys a waistcoat, tries to make sure that it will be wearable with some particular trousers and coat. In buying or placing cement architectural ornaments in or upon a building, sound architectural advice should be taken, to avoid mixing historic styles or incorporating something without fitness or relation to the design. Under wise restrictions, however, there is no doubt of the immense value of this new method of reviving intimate association with the architectural classics.



Cement Detail on House of Pliny Fisk, Esq.

DAMPNESS IN A BUNGALOW is the most serious foe to comfort, and often endangers the welfare of the household. The floor should always be at least two feet from the ground. If the bungalow sets low, the ground should be dug out for this distance below the floor joists. Walls, however thin, should be tight; and a sound roof is quite as important as a firm foundation. During cool weather the fireplace will have to be lighted, to make the living-room habitable, but it will be of little service at drying the party that has gone a-jaunting and suffered a drenching, if there are not dry cupboards from which fresh clothes are forthcoming, and means of drying the wet garments indoors. Cupboards in a bungalow should never be upon an outside

wall, but as near the chimney as possible. If there are two flues in one chimney stack, they may be divided and a high-up cupboard built between them within the breadth of the chimney. A clothes-arm can be arranged which will fall outward on opening the door of the cupboard, and assuming a horizontal position will hold damp clothes over the fire to dry.

TILE AND CEMENT ROOFS. — A very beautiful effect can be given to a concrete roof if clay tiles or varied light-toned colors be partly imbedded in the concrete. Such an experiment was shown at a recent Arts and Crafts Exhibition. The effect was precisely that of the old roofs to be seen in Spain.

How Bill Jones built a Fireproof Bungalow for \$2,500

By HUBERT G. RIPLEY

AMONG his other admirable qualities, Bill Jones was a regular subscriber to *INDOORS AND OUT*, and having read the many fascinating articles about all kinds and styles of bungalows, decided that when the disease took with him he would build a bungalow of concrete, as he allus cal'lated it would make Henry jealous, Henry having just finished his bungalow out of some loads of lumber condemned by the rising young architect of Mrs. O. Howe Rich's seashore villa.

Now Bill, being unmarried and having no wife to advise him, and distrusting the *savoir faire* of Henry's wife, went to the rising young architect, who concealed his pleasure behind a cough and agreed to do Bill for as much as Bill would stand, and a bungalow besides.

The lot was on a high sandy bank, overlooking the shore, with a westerly exposure, and on the beach below, within easy distance, were great piles of pebbles of varying sizes. Really, all they needed was a carload of cement, half a dozen Dagoes, two superannuated carpenters, and what lumber was left from Henry's house; and if that was not enough, then the rising young architect promised to condemn another load from Mrs. Rich's villa.

Bill balked a good deal at paying the architect ten per cent commission, but his eyelash fluttered at a critical juncture, and the rising young architect, who had really completed the drawings and specifications before Bill knew he had started on them, held fast, and Bill went away thinking he could easily make it up by lunching at a cheap spa for a week.

In a surprisingly short time the Dagoes had torn great gaping holes in the sunny sand bank, and before the architect made his first visit—Bill was incidentally nearly distracted because they

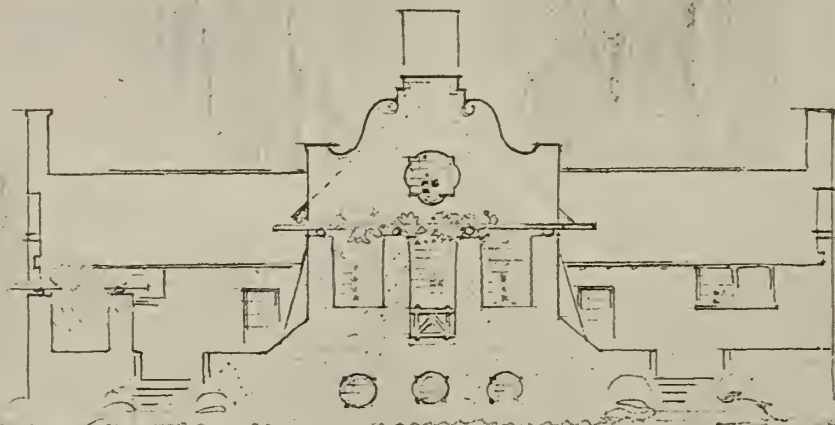
put the house five feet farther away from the shore than he thought it was going—all the foundations were in, and nobody knew whether the concrete was one in four or one in eight. When they tried to make a hole through the wall for the soil-pipe, which was forgotten at the time the wall was built, and Tony worked all day with the pick and bar, and many choice Italian oaths, without doing any damage to the wall, they decided it was all right, and for the future the architect promised to run over every time he came down to Mrs. Rich's villa.

Except for a few places where the centering bulged from the weight of the concrete, the walls looked very decent when the "cribbin'" was taken down, and by going over them with a pail of grout and a whitewash brush before they were fully hard, a soft, dull tone was secured, that made even Mrs. Rich look twice at it through her rich and jewelled lorgnette. "Naughty man," said she to the architect, "why did you not tell me about this concrete, that we might have used it for our villa?" "Rully," replied the architect, swallowing hard, "we thought we had best do all the experimenting on the folks who could not afford it and stick to the good old-fashioned ways when mingling with the *baut ton*."

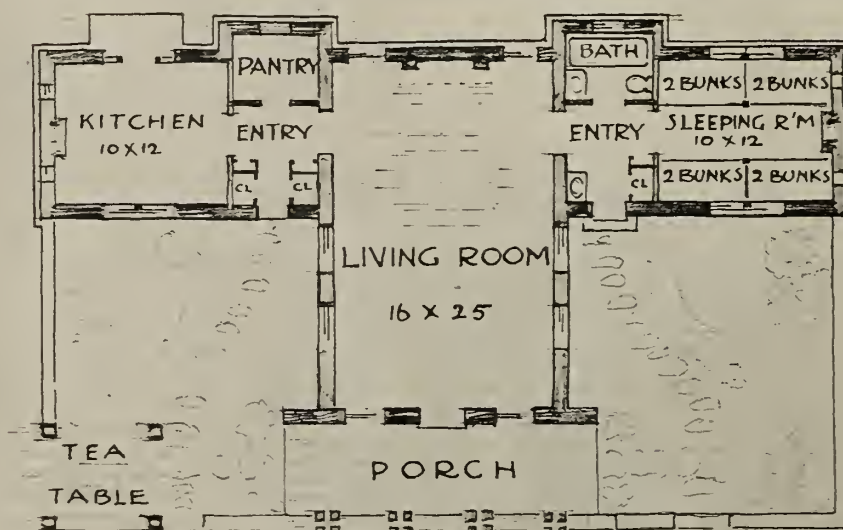
The walls, foundations, floors and partitions, being complete, there remained only the roof, doors and windows and plumbing, and the architect began to have cold chills when he saw how little the work had cost to date; but nothing daunted, he steered Bill up against some *recherché* plumbing fixtures and got him interested in some new patent-applied-for combination self-opening and closing faucets, with non-shrinkable semi-adjustable washers, and some near-porcelain tubs and bowls.



THE FRONT PORCH



· FRONT ELEVATION AND PLAN OF
· A CONCRETE FIREPROOF BUNGALOW ·
· · · RIPLEY AND RUSSELL ARCHITECTS · · ·
· 8 BEACON ST BOSTON ·



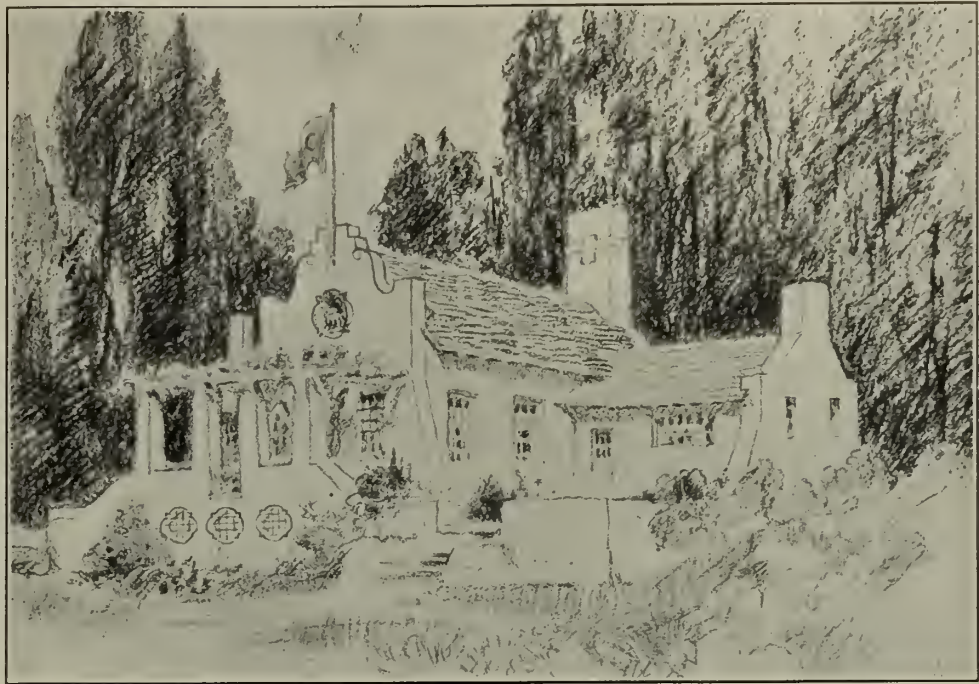
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THE FRONT ELEVATION AND THE SINGLE FLOOR PLAN

Bill appeared absent-minded for a week after the plumbing contract was let and took to lunching at the cheap spa again and giving up his noon Teddy-bear cocktail; but when the fixtures were all in and the polished nickel work and immaculate porcelain reflected the sunset glow and dazzled Henry's eyes, he felt repaid, and even went so far as to ask why they did not allow space for a shower bath.

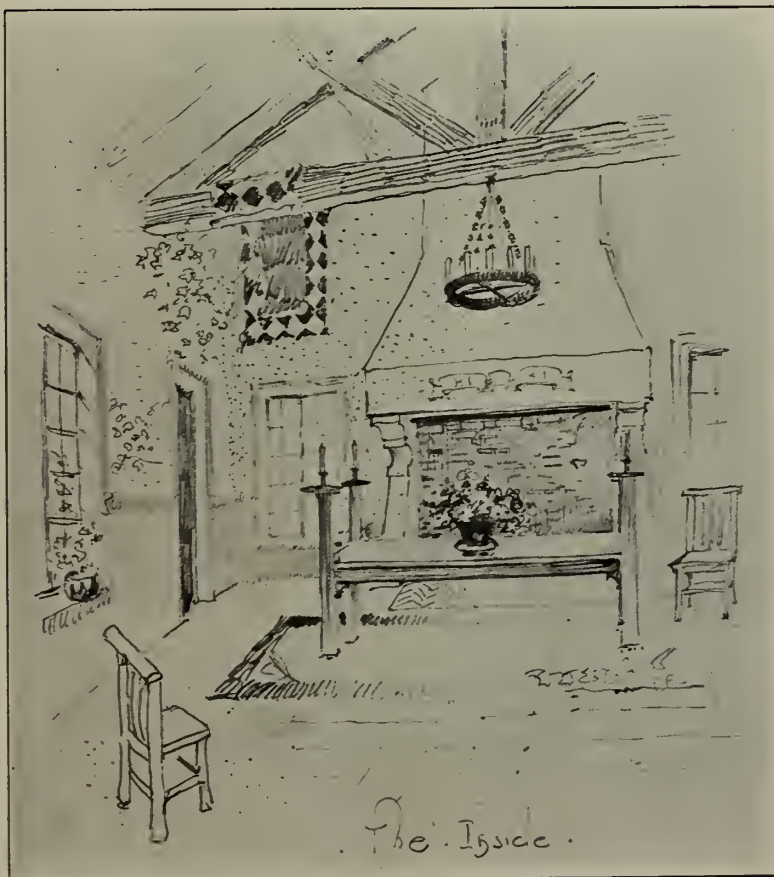
Henry's wife said she would never feel at home on the granolithic tiled floor, even if it was stained an old Indian red, but all Bill's men friends thought it was great, so easy to wash up.

The walls were scrubbed down with a board and painted in cold water paint, with more of those soft, dull tones. The wood trusses and



A PERSPECTIVE SKETCH

under side of the roof boarding were finished in a dark fumed smoke effect; and the quick growing multifaria tribulata, the scarlet-hued cornucopia tricuspidata, and the deep browns of the Las Perlas Obsequios, with their red and gold bands, so enlivened the trellised porch, that all the visitors to Nonesuch Park stop for a second glance when passing by, though Henry's wife and Mrs. Rich never mention Bill's bungalow over their cups.



A PORTION OF THE LIVING-ROOM

A SPACE-SAVING CONTRIVANCE in a small bungalow which has a bathtub is to have a wooden lid to completely cover the tub when not in use. This cover may be made of several boards tightly laid together and secured by battens, and should have several holes bored through it for ventilation. Where a bathtub is desired and there is not the usual space for it available, a "folding bath" is to be recommended. This stands on end in a corner closet in the sleeping-room, and when the door of the closet is opened, it swings outward to a horizontal position, and obtains the water from faucets at the back of the closet. This snug arrangement well cares for the tub when the bungalow is abandoned in winter.



IN THE PATIO OF THE HOTEL GREEN
AT PASADENA, CALIFORNIA

The Mission Style in Modern Architecture

BY GEORGE WHARTON JAMES

IV. The Patio in Mission and Modern Architecture

IN most of the California missions and many of the old ranch houses the "patio," or inner court, is a prominent feature.

There has been much discussion as to where the "patio" originated. One distinguished author, Prof. Charles F. Holder, says, "Who first originated the idea is not known. The Indian *remada* might be called a primitive patio; as I have seen it, it comprised a square or oblong place covered by the branches of trees, or tule, in which the owners passed much time, the house being around or back of it.

"I watched the pseudo development of this idea some years ago at one of the Indian fiestas in Southern California, this particular one being the fiesta of San Luis Rey at Pala, a little settlement in San Diego County, at the foot of Mount Palomar, a lofty pile about which the elements have played havoc. The Indians who arrived in advance began at once the erection of an oblong platform, perhaps fifty by twenty feet. This was to be the central court, as it were, and represented the patio idea in so many beautiful houses in Southern California, Mexico, Cuba, Spain, Morocco and elsewhere. The floor was covered with planks, and around the sides stakes were placed, forming a frame and roof over which branches were thrown, taken from the chaparral, greasewood, adenostoma, mountain mahogany, bay and others, producing a perfect protection from the sun and a roof that was redolent of sweet odors.

"The *remada* complete, the builders began to erect little booths on the sides, which were rented to various speculators. One was a wine room, another a grocery shop, another devoted to fruit, the next contained a gambling outfit, until, when complete, the central court was surrounded by these miniature rooms or shops. In the evening the men and women danced in the court, and the dancers patronized the various stalls or booths."

Another California writer, Charles F. Lummis, claims that "The patio house derives from the good old days when every man knew that he

needed to defend himself. From the walled cities of antiquity — and of people who, even in times of modernity, have not forgotten to live — the evolution was logical and easy to a similar domestic community, or republic, self-centered and self-sufficing. When America was discovered, whole populations of the West were living in patio houses of as many as two thousand tenants. Among those Indians who can afford it the individual dwelling is still built on this defensive plan; and throughout Spanish America as much is true."

It seems to me that the patio is a self-evident development from the most primitive days, and that it is a manifestation of a well-known animal instinct. We are all more or less familiar with the pictures of a band of wild horses in the desert or on the plains, repelling the attacks of their animal foes. Their colts in the center, the mares and horses surround them with heels out, and are thus ready in the most vigorous fashion to repel any attack.

When man began to exercise the gregarious instinct and gather together, as did the animals, it was natural that when he was attacked the helpless should be placed in the center and those capable of defending them arranged around. This primitive instinct was manifested during the "days of '49" when the exodus to the gold regions of California took place. On leaving the Missouri River a number of separate teams generally united and, under the command of a competent leader, started on their long and arduous journey over the plains. It was the rule with all well conducted trains to camp each night either in a circular or square form, so that the wagons formed a barrier against any foe.

When man began to build houses it was natural that, recognizing the need of defense, he should follow out this primitive instinct and build his community house with high walls outward, around an inner court, so that the house would be at once a home and a fortress. This is well exemplified in all the Pueblo Indian villages, such as Taos, Acoma, Zuni, and others of these



THE PATIO AT SAN JUAN CAPISTRANO
Where the Industries of the Mission were carried on

interesting aboriginal villages in New Mexico and Arizona.

While this chain of reasoning seems to be perfect, it is possible that still another idea may have suggested the origin of the patio. All students of religious architecture are familiar with the fact (as exemplified in the biblical descriptions of the Jewish tabernacle and temple) that there was a series of courts, separated from each other by walls, and that these led from the outer to the inner, which was always the most sacred, or the "Holy of Holies." Sentimentalists may see in this the germ of the patio idea as applied to the home. The inner court was necessarily the most sacred — the secluded part of the dwelling as far as the outside world was concerned.

In Spain and Mexico the patio has had its fullest expression. When the padres and Spanish Dons came to California they necessarily brought with them the architectural ideas with which they were familiar. Hence, in practically all of the missions and most of the old ranch houses the patio is in evidence. As a rule, it was

enclosed on all four sides, but this was not imperative. It was convenient to have the church, the houses for the padres, the houses for the neophytes, and the workshops all opening into the patio and thus surrounding it. We may take as an illustration of this method of construction the patio at San Juan Capistrano. Here all the affairs of the mission were carried on. The patios, during working hours, resounded and re-echoed the busy hum of Indian men and women, and one could distinguish the various noises of the different occupations,—the shrill

beat of the hammer upon the anvil in the blacksmith shop, the duller stroke upon the leather by the shoemaker, the driving of plane by the carpenter, the saw, the scraper dressing leather, the whiz and dull thud of the loom, and the thousand and one sounds of busy people, over and above which was heard the merry laughter and shrill voices of children at play.

At Santa Barbara, to this day, the mission patio is used as a working place, a place of rest



THE BASKET-MAKER OF SANTA BARBARA

and recreation, of meditation and prayer. It is sacred to the uses of the Franciscan monks, clerical and lay, who now use the old mission as a preparatory college for missionaries of their order. An illustration shows one of the industrious brothers who makes all the baskets, not only for the use of this mission, but for several others, busily engaged at his useful occupation. At certain hours every one in and around the patio is required to be silent. During others social converse is enjoyed. The patio thus affords an out-of-door meeting place, free from any intrusion from outsiders. An illustration shows the oldest member of the fraternity talking with Father Anthony, the president of the near-by training college, of the beauty of the flowers that Saint Francis, the founder of the order, loved so well, while one of the lay brothers, who has been out in the vegetable garden digging potatoes for supper, stands near and listens to the simple but elevating discourse of the older and wiser men.

Readers of that fascinating California romance, "Ramona," will remember how Helen Hunt Jackson describes the inner court and how the life of the house centered around it. Here, then, in California, the patio, in domestic architecture, has long been domiciled. Of course, in all great buildings, such as hotels, business blocks, etc., where light and air are essentials, the inner court is a necessity. It provides air and light and no more. It is not made to reach to the ground floor, and there is no attempt to beautify it or make it a place of rest and comfort. The inner court of the Hotel del Coronado is an exception, as was the world-famed court of the Palace Hotel in San Francisco, destroyed by the fire of April, 1906.

At the Glenwood Hotel, Riverside, Cal., built five years ago, the patio idea in its fulness was introduced, although it was not completely

surrounded on all four sides. The hotel was built around it on three sides, and the fourth was made the main entrance to the hotel. But so well is the patio screened by trees and shrubs, by campanile and tea room, that a privacy is gained with an open air space as generous as it is delightful. In the illustrations this modern adaptation of the patio can well be seen. The best rooms face on this court, and it is so large that though it opens upon the public streets, one may sit upon the lawns or under the rustic pergola in perfect seclusion.

The introduction of the campanile, individualistic and original in its appearance and use,



CONVERSING IN THE PATIO OF SANTA BARBARA

though modeled somewhat after the campaniles of Pala, San Gabriel and San Antonio, and the retention of the small adobe structure, with its red tiled roof, both add to the general effect and afford shade and shelter.

At the Hotel Green, Pasadena, the patio idea is carried out in a rather unique manner, in order to meet the exigencies of a restricted building area. This hotel has been thrice enlarged. The original portion of the building was on the east side of Raymond Avenue. When its enlargement was demanded it was made four times its original size, the extension going northwards.



VIEWS OF THE PATIO AND MAIN ENTRANCE TO THE GLENWOOD HOTEL
RIVERSIDE, CALIFORNIA



The following year it was necessary to more than double its enlarged capacity. How could this be done? It had reached to the street to the north, and to the south an extension was not desirable. So the whole block on the opposite, or western, side of the street was purchased, and an entirely new building erected there, connected with the eastern building by an arched passageway which crossed over the street. A large space was then left for the court between the two buildings, where privacy is secured by shrubbery and tall flowering masses, and yet the street passes through it.

It is of the patio, however, as an adaptation for the comfort of the family in private houses that I wish to see a development. The chief



THE PATIO OF MR. CHARLES F. HOLDER'S RESIDENCE

thought in the preparation of every home should be the health and comfort of its habitants. It cannot be denied, however, that in America the development of our domestic architecture has re-

versed this natural order. We have planned first, last and all the time for show, for ostentation, for the public eye, and suffered all kinds of inconveniences simply that we might make a striking appearance on the outside. Privacy and comfort have been secondary or tertiary considerations, — if ever they were considered at all. Indeed, there is no alternative between publicity as great as that of the streets and retirement to one's own rooms.

Our privacy, on the other hand, should be merely a frank re-



PATIO IN MR. CHURCHILL CLARKE'S RESIDENCE



THE PATIO OF HON. R. N. BULLA'S RESIDENCE
In Los Angeles

quest for home seclusion, where husband and wife, brother and sister, parents and children, with friends, may have the pleasure of home intercourse out of doors, free from the prying eyes of curious outsiders.

Now, in the warm climate of California, this is a reasonably easy problem, for sunshine and warmth are the rule there rather than the exception. In the East, with its winter snows and cold, the patio presents a different aspect and must be treated accordingly. In this article I shall merely present four specimens of patios, each individualistic, and all of which afford good suggestions for others. In Mr. Charles F. Holder's residence at

Pasadena, the out-of-door, sunshine-all-the-year spirit is clearly revealed in the small fountain in the center which never ceases playing, and the vines and roses which are trained upon the walls. This patio, as the picture reveals, is not entirely enclosed. The arches open to the lawn, yet perfect seclusion is gained. The floor is cemented, so that rain drains off easily.

The patio of the Churchill Clarke residence is, on the other hand, entirely surrounded, and is a typical patio for a small house. In its center is a fountain and square pond, around which are aquatic and other plants, shrubs and flowers. It is surrounded by a veranda, the roof of which is a continuation of

the roof of the house, sloping in all directions to the center. All the rooms of the house open upon this patio, so that one can go from any part of the house to the other, using the patio as a passageway.

Another form of patio is that built on an ordinary, crowded city lot, where all space is valuable and houses elbow one another in close proximity. Instead of devoting all the outside space to lawn and back yard, Mr. Bulla asked for the privacy of a patio added to the main building. It will be seen that it is cement floored, with boxes for flowers and palms to grow inside, while roses and trailing and climbing vines are growing on the outside.

(To be continued)

SOME OF WHISTLER'S "PROPOSITIONS" given in Elizabeth Luther Cary's volume upon his works are :

A picture is finished when all trace of the means used to bring about the end has disappeared.

To say of a picture, as is often said in its praise, that it shows great and earnest labor, is to say that it is incomplete and unfit for view.

Industry in art is a necessity—not a virtue—and any evidence of the same in the production is a blemish, not a quality ; a proof, not of achievement, but of absolutely insufficient work, for work alone will efface the footsteps of work.

PAPER KETTLES FOR CAMPERS are a Japanese invention. Though made of pliable paper they can be hung over the fire long enough to bring the water to a boil. One kettle

can be used about eight times. The German army has been supplied with them, and the army of those who live outdoors the world over will no doubt rejoice to find so light and inexpensive a utensil adapted to their use.

THE LARGEST PLAYGROUND IN THE WORLD, it is said, will be Jersey City's. It covers above 69 acres of the meadows west of the city and bordering on the Hackensack River. It is proposed to have an esplanade, a swimming pool, refectories and recreation piers. There will be provision for baseball, tennis, golf and cricket, and in a great central fieldhouse all may prepare themselves for the games. In winter there will be an immense skating rink.



(A.) NATURAL AND ARTIFICIAL BATHING POOLS ON PRIVATE ESTATES



(B.) A is a natural inmaking of the sea at Magnolia, Mass., where a cleft in the rocks has been merely closed by a short wall built of the shore boulders. B illustrates a pool at Port Chester, N. Y., entirely formed by means of masonry walls in a cove of the Sound. Both retain the water during ebb tide.

A Tyrolese House in America

A PICTURESQUE ADDITION TO A WOODED HILLSIDE

WHY not a Tyrolese house?" asked the architect. My neighbor stared at him.

"Here is the very place," the professional gentleman continued. "What a beautiful wooded hillside! Unconventional site, unconventional house,—at least individual. These rugged oak boles and their arches of foliage, ah, how they recall the gray and green of the Tyrol,—typical colors which you find woven in the stockings of the chubby mountain boys there, and in the gray plastered walls and green shutters of the houses—those charming mountain cottages,—you know them, don't you?"

My neighbors had never been to the Tyrol. Neither had I. But I had always liked the name and had associated it with a wonderland full of romantic things as delightful as they were unknown to me.

The architect continued to expatiate on indi-

viduality and character in the design of a house. No one disputed him. My neighbors were open minded as to the exterior, so long as it be distinguishable from the Browns' and the Jones'. Their demands were reasonable. What they did want was a house that would be comfortable to live in and well thought of by the neighborhood. There were no other houses close by; so this was to make or mar the virgin hillside.

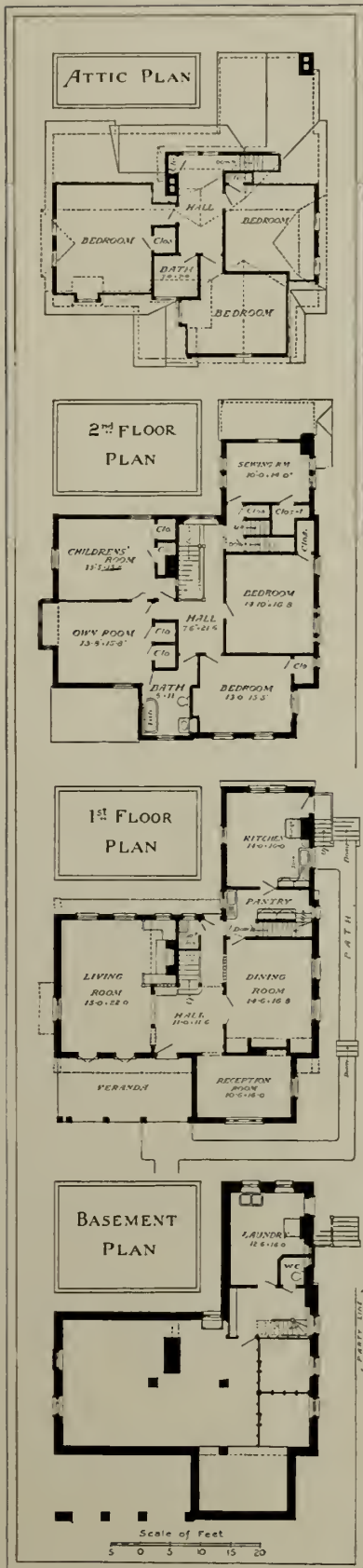
"After all," counselled the family, "what difference does it make about the style? We can trust Mr. Architect for that. If he gives us a bright and convenient interior he'll attend to the outside and we shall be satisfied. Let him go ahead and let's see what he'll do."

So the plans were made, the architect ardent over the individuality he was determined the house should have, the family in suspense as to what would fall to their lot inside. When they



THE HOUSE FROM THE STREET

The Walls are of Gray Plaster, the Shutters Green, and the Gables' Ends are the Natural Color of Rough-Sawn Chestnut



THE FOUR FLOOR PLANS OF
THE TYROLESE HOUSE

The Property of
Richard L. Bentley, Esq.
at Roland Park, near Baltimore



THE HOUSE FROM A NEIGHBOR'S LAWN

at last saw rooms of size not sacrificed to the exterior, they were forced to conclude that the architect's scheme was practical after all. Gathering

about the plans he pointed out a symmetrical entrance hall and guided them by pencil to the left into a living-room, fifteen by twenty-two feet, with an angle-nook in addition; to the right into a reception-room and to a dining-room with alcoves to contain sideboard and chairs. The kitchen and pantry were found to be all that could be desired. The laundry was shown in the basement; but on account of the lower grade



THE REAR OF THE HOUSE FROM BELOW ON THE HILLSIDE



THE ENTRANCE HALL

With Openings arranged symmetrically. The Spindle Grille over the Seat forms an end of the Living-Room Ingle-Nook

at the back of the house it would be entirely above ground.

That three doors would keep the kitchen odors from going upstairs was a point made in passing to the plans of the second floor. There bedrooms were found well lighted, with windows placed to give cross-draughts in summer. Closets?—plenty of them. The architect dwelt on the symmetry of the rooms,—that there were no awkward angles,—and the balance in the position of the windows,—that they were equidistant from the corners of a room or directly opposite the door entering it. In the room allotted my neighbor and his wife a feature was pointed out as the rectangular bay of the Tyrol, called by the Tyrolese an *erker*, from the fact of its being often placed at the corner of a building. It really did seem to have some advantages of construction and finishing over the “splayed bay,” as the architect termed the familiar American form.

The third floor contained great possibilities. Space there seemed limitless. For reasons of economy, however, there was to be only one room plastered and finished, and this for the servant. Imagination ran to the furnishing of all

the rest of the rooms, and to the convenience of having a bathroom adjoining them; but finances were grimly faced, and “one room only to be plastered in the third floor” was the direction given to the architect and passed to the builders who were to estimate.

One bid came easily within the first limit of cost set by my neighbor, and work was immediately begun. To the sweet odors of the wooded hillside was added that of new lumber, the freshly felled trees that were reluctantly sacrificed, and the pungent scent of creosote shingle stain. Hammer-blows and cheery sawing resounded merrily, and

the only silence other than the daily lunch hour were pauses when the carpenters pondered over an oddity of detail or discovered that the roof rafters, instead of being straight, as they supposed, were to have slight divergences. It was then that a few opinions were recorded upon “the things them *artch-ee-tecks* draw.”

But as weeks went on, these very men caught the enthusiasm of a “house that was different”; and the owner, on frequent visits, realizing the completeness of the interior, caught the true homebuilder’s enthusiasm and ordered the entire third floor to be plastered and finished, and the bathroom there to be fully equipped. In five months the house was completed, and the family moving was lightened by their delight in the expansive new quarters. The builder twinkled satisfaction, the owner felt sure he had invested his money well in obtaining such a house, all complete, for about \$12,500, and the architect pacing around his work, drew breaths of pride and pointed out the individual features, the pleasant color, the graceful rooflines of what he declared was the first Tyrolese house in America.

G. S. H.

The Home Grounds



GRADING THAT IS NO GRADING. — A frequent mistake in attempting to grade a small house lot is to let the ground slope off irregularly and in careless fashion, without definition and without relation to the house itself. This is merely cleaning up the grounds after the building operations; it is not grading. A house on a small lot is a formal affair, dominated by a rigid structure of certain lines and planes. Similar lines and planes should therefore be extended to the grounds. Lawns within such confines should be planes and nothing less. If a change of level is to be made, a terrace is the only logical method of doing so. Let there be a terrace, then, straightly formed and with determination. Look to the architecture of your grounds.

DON'T NEGLECT THE TREES that have been planted in the spring. As the season wears on and blooming plants attract attention, it is easy to forget the young trees that were set out with so much interest a few months ago. On going out to examine the trees the grass will be found to have crept over the once fresh soil that is now caked or parched. In the midst the tree may be swayed by the wind in a hole thus formed too large for it, like a collar too big for the neck. The remedy is easy. Free the ground of weeds and grass within a radius of at least one foot from the tree. Break up and crumble the surface of the soil. If the tree is not firmly set it should be "staked," *i. e.*, supported by means of three poles set about it in tripod fashion and firmly bound. This is especially necessary to correct a young trunk that is naturally crooked.

HYBRID RHODODENDRONS, which come into vivid bloom by the time other plants have scarce put on their spring clothing of leaves, always appear best against a mass of larger foliage of their own family. Coniferous shrubs and low trees may be the final background of the rhododendron group, but immediately behind the

hybrids should be placed *Rhododendron maximum*, interspersed with some of the *Kalmia latifolia* (Mountain Laurel). These bloom later than the hybrids, but are scarcely less lovely. They are very hardy, inexpensive and are coming into such favor that nurserymen are invading our eastern mountains and bringing the plants out by the carload.

RAINWATER SUPPLY FOR DWELLINGS. — In this dry season, when wells are exhausted and the gas engine palpitates, the rural dweller thinks radically on the question of water supply. How seldom is that water which comes from the clouds realized and appreciated sufficiently by the cottager for him to collect it. A few facts should be considered. The average amount of water required for all purposes by each member of a household every twenty-four hours is 25 gallons or 3.33 cubic feet. In most regions of the United States the average precipitation by rain or melted snow is over 40 inches. It is easily seen, therefore, that the amount of water to be obtained from the roof of a cottage is quite sufficient to reward one for the labor and cost of preserving it. If there are a series of outbuildings connected with the house, as is frequently the case in northern parts of the country or in mountain districts, the supply of rainwater to be obtained is augmented. It should be conducted from one roof to another and finally collected in at least two receptacles. The traditional barrel at the kitchen or woodshed door is a picturesque affair, but the water heats or freezes in it and also evaporates. Underground cisterns are best; and there should be two, in order that one may be cleansed while the other is being used. The cost of these cisterns is slight and the water can be drawn from them either by tripod, rope and bucket or by a pump. Or the collected rainwater may be led directly into the well on which the household has already depended for its water supply.



From Our Office Window

THE MONTH FOR OUT- DOOR SLEEPING

Such is August. It behooves him who has been cogitating as to whether sleeping outdoors is merely a fad or a means of substantially benefitting the health to make a practical test and to give himself to Morpheus and the stars. Better to begin now than in December. In the suburbs are to be seen many improvised accommodations, varying from tents to more permanent structures. A secluded upstairs balcony or veranda is by far the most comfortable sleeping place for those who wish the fresh air of the night.

A BISON PRESERVE FOR THE WEST

You may lead an animal to a preserve but you cannot make him thrive. Possibly Governor Hughes believed this when he vetoed the bill to place a herd of American bison in the Adirondack Mountains. The projectors of the plan have not put very far forward their proof that the bison of the Western plains will thrive in a locality unlike their habitat. If there is to be public herd it should be under absolute natural conditions, where the animals will enjoy life and not be merely eking out the history of their noble race. Let New York State stock its North Woods with moose and courageously preserve them against the hunter, be he millionaire or not, and let some Western State establish a large family of healthy bison and dedicate it to President Roosevelt.

FIRES AT COAST RESORTS

The disastrous fires at Revere Beach near Boston, the burning of thirty-five acres of buildings at Coney Island and the destruction of the famous Long Beach Hotel point again to the need of fireproof structures, especially out of town, where the local fire brigades are often ill-equipped and inefficient. At such disasters as these cited, however, all that the best fire brigade could have done would have been to save some of the neighboring cottages by limiting the area of devastation. It is in the construction of the larger build-

ings that the real danger lies.

"The season is too short for permanent improvements and costly buildings," say the seashore proprietors. Wood, however, is increasing in cost and there is concrete ready to aid them. All the places mentioned will be rebuilt,—no doubt hammer blows are already ringing, and the chances are they are ringing upon wooden buildings as of yore: Is it not careless habit that rebuilds what a lack of foresight first erected?

STREET NOISES IN CITIES

Worse than New York is either London or Paris in the matter of street uproar, say the officers of the New York Society for the Suppression of Unnecessary Noises, who are now investigating conditions abroad. Prof. Morton Arendt finds the Strand noisier than any street in America. The din in Paris must have been in the old quarters, for it is certain that wide streets, lined with trees and comparatively low buildings and interrupted by the many open spaces such as are found in the newer Paris, serve to dissipate noise and render it inoffensive. Such causes of street noise as rough paving, heavy, loosely-gearred vehicles and metal tires, the alarms carried by electric cars and automobiles and the shouting of vendors are being lessened as rapidly in New York as anywhere. Even the towboats plying around it have been restrained. An elevated railway is of course beyond the pale of silence, but this feature of the New York avenues has already heard its death-knell sounded by the successful subway. Of course there are invalids to be cared for, which may be done by establishing "silent zones" for hospitals. Then there are nervous cranks who object to the sound of horses' hoofs and even human feet; but we believe the average set of nerves can get along as easily in an American city as in any city in the world where life goes on. Let neurasthenics seek the dead cities of the Zuyder Zee and elsewhere.

INDOORS AND OUT

THE
HOMEBUILDERS
MAGAZINE

SEPTEMBER



ROGERS AND WISE CO.-PUBLISHERS
NEW YORK BOSTON CHICAGO



ORIGINAL MANUFACTURERS OF
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NEW YORK BELTING & PACKING CO. LTD.
91 & 93 CHAMBERS STREET, NEW YORK.

Indoors and Out

A MONTHLY MAGAZINE DEVOTED TO THE BEAUTIFYING OF AMERICA
CHIEFLY BY MEANS OF ARCHITECTURE AND THE ARTS ALLIED TO IT

ROGERS AND WISE COMPANY
PUBLISHERS 85 WATER STREET BOSTON

NEW YORK
4007 Metropolitan Building
1 Madison Avenue

Copyright 1905, Rogers and Wise Co.
Entered at the Boston, Mass., Post Office as Second-Class
Mail Matter, October 14, 1905.

CHICAGO
302 Ellsworth Building
355 Dearborn Street

SUBSCRIPTION PRICE \$3.00 A YEAR IN ADVANCE. FOREIGN SUBSCRIPTIONS \$4.00
SINGLE COPIES 25 CENTS

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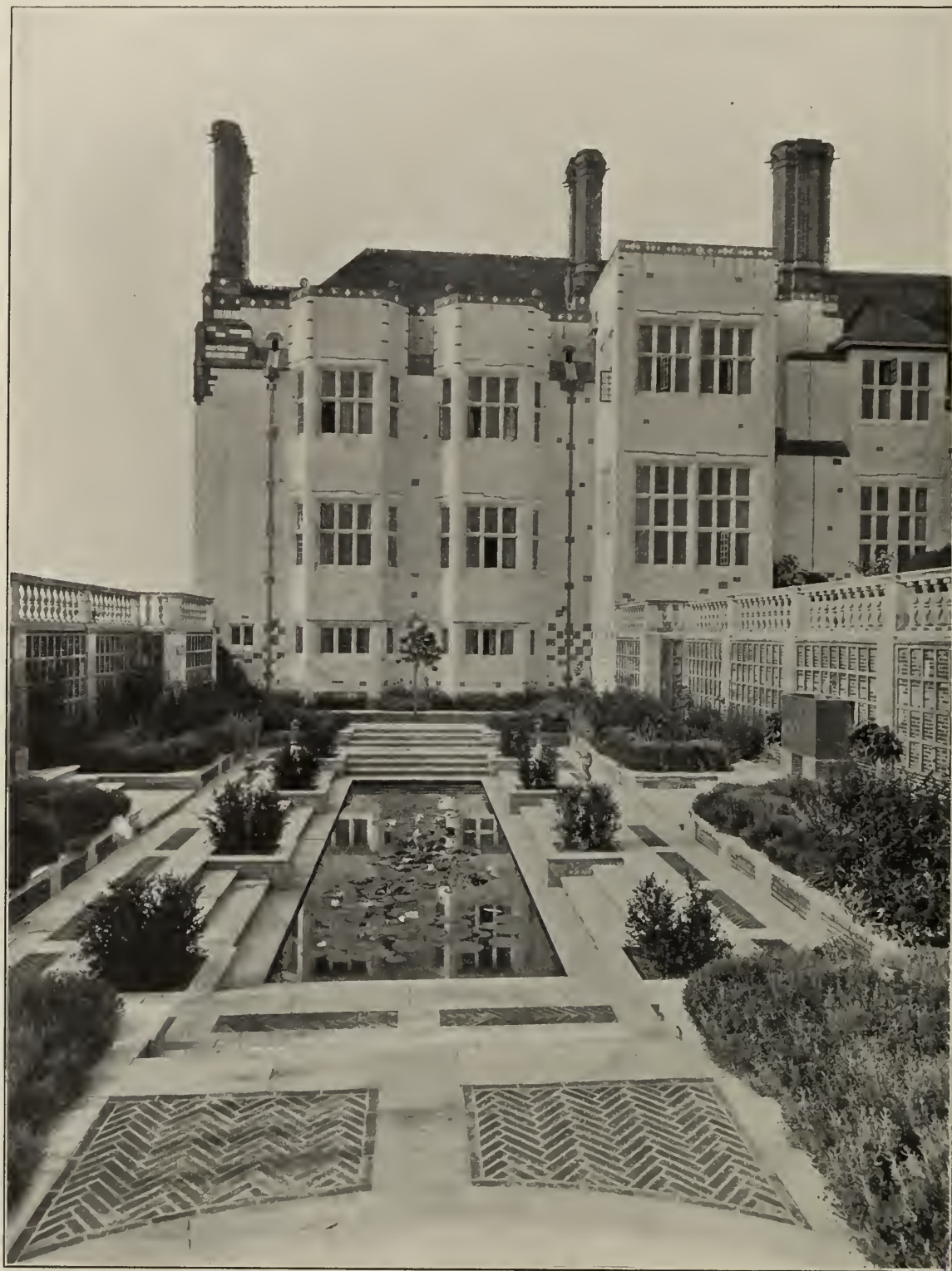
Contents for September

VOL. IV

1907

No. 6

THE SUNK GARDEN AND THE LILY TANK AT "MARSH COURT"	Frontispiece
A SUMMER COLONY IN THE MOUNTAINS By Ruth E. Chambers	245
	(Illustrated)
PLAYHOUSES FOR THE CHILDREN By Carl Hobel	254
	(Illustrated)
A MANSION WITH FORMAL SURROUNDINGS By M. B.	263
	(Illustrated)
PAPER-HANGING IN PANELS By A. Bryant Parker	269
	(Illustrated)
THE MISSION STYLE IN MODERN ARCHITECTURE.	
V. The Arched Corridor or Ambulatory in Mission Days and Its Modern Application By George Wharton James	271
	(Illustrated)
HEDGES FOR THE COUNTRY OR SUBURBAN ESTATE By Ernest Hemming	276
	(Illustrated)
A NEW HOUSE IN AN OLD STYLE	282
	(Illustrated)
ORDER AND DISORDER By Herbert J. Kellaway	287
	(Illustrated)
THE INDOORS AND OUT SERIES OF MODERATE COST DWELLINGS.	
III. A Small House to be built of Concrete	
	By Kenneth Murchison, Architect
	289
	(Illustrated)
A BATHING POOL ON A PRIVATE ESTATE	290
	(Illustrated)
THE HOME GROUNDS	291
FROM OUR OFFICE WINDOW	292



THE SUNK GARDEN AND THE LILY TANK AT "MARSH COURT"
A Mansion with Formal Surroundings Designed in the Modern English Style. (See page 263)

Indoors and Out

A MONTHLY MAGAZINE DEVOTED TO THE BEAUTIFYING OF AMERICA
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VOL. IV

SEPTEMBER, 1907

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Cottages Perched on Mountain Heights at Pocono

A Summer Colony in the Mountains

CHARMING COTTAGES GROUPED ABOUT A COMMODIOUS INN COMPRISE THE QUAKER SETTLEMENT OF "POCONO MANOR"

BY RUTH E. CHAMBERS

THE BUILDINGS DESIGNED BY WALKER SMEDLEY, ARCHITECT

SOMETHING over one hundred miles from New York, and a little farther from Philadelphia, is the summer settlement of the Quakers in the midst of the Pocono Mountains. "Pocono Manor" it is called. There the "Friends" have erected an extremely picturesque and comfortable hotel, and here the sympathetic "outsider" is made welcome, providing he is willing to conform somewhat to the ideals of restfulness and propriety held by the founders of the colony. Selecting their own tract of seven hundred and fifty acres, they have built their hotel on the spur of the mountain, which commands an extended panoramic view

of the Paradise Valley and Delaware Water Gap, with the Catskills fading away in the distance.



AT THE SPRING OF THE MANOR

The hotel is all that the most fastidious person need demand, unless, indeed, his tastes run to stringed instruments, dancing and bridge whist, — modern hotel accessories despised by the comfort-loving Quakers. Their own ideas of recreation include all outdoor sports, for which ample provision is made, and such indoor amusements as can be conducted without disturbing others. Near the hotel is an attractive bowling alley, where the Philadelphia dignitaries lay aside their "broad brims" and "plain coats" and produce some very creditable scores.



SEEKING WOODLAND SECLUSION WITH CANOE



THE SWIFTWATER — A SPLENDID TROUT STREAM



OVERLOOKING THE RAVINE OF THE SWIFTWATER

They are equally at home at the shuffleboard and on the croquet ground, and are not above a friendly rivalry at tennis or golf. In fact, once away from Arch Street the Philadelphia Quaker displays a very ordinary quality of human nature.

For all lovers of fishing and "little rivers" there is the sparkling Swiftwater, most beautiful of mountain streams. In its limpid depths the boy Van Dyke made his earliest casts, and by its shallows he still delights to wander. "I lay," he says, "on a mossy bank at the foot of a tree, thinking how hard it would be to find, in any quarter of the globe, a place more fair and fragrant than this hidden vale among the Allegheny Mountains." And in "The Open Fire" he speaks of "an-

gling in the Swiftwater one May evening and coming upon Joseph Jefferson, stretched out on a large rock in mid-stream, casting the fly down a long pool. He had passed the three-score years and ten, but he was as eager and as happy as a boy in his fishing."

"You here!" I cried. "What good fortune brought you into these waters?"

"Ah," he answered, "I fished this brook forty-five years ago. It was in the Paradise

Valley that I first thought of Rip Van Winkle. I wanted to come back again for the sake of old times."

Even the Quakers, who had little sympathy with Jefferson's profession, could hardly have resisted such a personality. One likes to fancy the conversation could Fate have thrown them together!



A MERRY PARTY AT THE BOATHOUSE ON LAKE MINAUSSIN



The Eastern Front overlooking the Swiftwater Ravine

THE INN AT POCONO MANOR



The Approach to the Inn upon the West

Below the hotel the Swiftwater has been widened into an artificial lake, several sizes larger than a soup plate, and somewhat similar in design. But it is a pleasant spot, and gives an opportunity for bathing and boating. Farther up stream an open camp, such as is common in the Adirondacks, provides a suitable retreat for camping parties, and those who long for outdoor sleeping under primitive conditions.

To the student of nature the reclamation of the wilderness is an event full of interest. Six years ago Little Pocono Mountain, with its neighboring valley of the Swiftwater, was untouched by ax or pick. Here and there a hunter's trail led the way to a distant settlement or along the stream to some swampy retreat for big game. Everywhere over the hundreds of acres now controlled by summer residents of the Manor, Nature ran her yearly cycle in bush and soil and stream with nothing to interrupt her.

In the summer of 1902, however, the ax and the pick arrived. Now the ruffed grouse and bear and trout must share the beauties of Little Pocono and the Swiftwater with the Friends, who have chosen this as the place of their summer migration.

Fortunately for both, the visitors are anxious to interfere as little as possible with the home life of these original occupants.

To the birds especially is accorded the right of eminent domain. If it is true that seventy per cent of North American birds nest within twenty feet of the ground, Pocono should furnish a breeding ground for the great majority of our north-eastern species, because the average height of the forest cover of this region is less than twenty feet.

This fact suggests the first chapter of the biological history of Pocono Manor. Some fifty years ago the pine and hemlock forests of the Pocono region were



ATTRACTIVE EXTERIOR OF THE BOWLING ALLEY
A Combination of Mountain Field Stone and Shingle

cut off, primarily for the tan-bark. Very soon the hillsides were covered with young deciduous trees, and along with these came huckleberry bushes. The huckleberry crop soon became a very valuable asset of the mountain residents, and because the young hardwoods were of no immediate value and seriously impeded the growth of the bushes, they were burned. Thus forest fires sweep thousands of acres every few years, with the result that the hillsides are covered only by young growth, even on those estates which for several years have been protected from such devastation.

So, many kinds of birds find the home they require at Pocono. During the past five summers nearly one hundred species have been found nesting on the Manor or in its vicinity. The



THE INTERIOR OF THE BOWLING ALLEY

nests of many of these have been photographed and their nesting habits studied.

The plant life of the region is also very interesting. No less than thirty-five different kinds of trees have been identified. One of these is a very rare hybrid oak found on Bear Mountain in 1903.

Some twenty-five species of ferns grow within a few miles of the Inn. Mounted herbarium specimens of all of these, and of most of the flowering plants of the region, are kept at the Inn for reference and comparison.

Many of the guests and cottagers are not able to participate in this active field work, though they are



A COMMODIOUS COTTAGE UPON A COMMANDING SITE
An Agreeable Effect obtained by Grouping the Horizontal Shingle Courses
Property of John Bushnell

hatched annually; or to Red Rock Glen or Paradise Falls, where, in addition to the usual beauty of the mountain streams flowing through brakes of rhododendron, banks of ferns and groves of hemlock and spruce, picturesque gorges have been cut by the erosion of the stream into the red Triassic rock of the valley floor.

The new-formed Lake Minaussin; the beautiful Swiftwater, with its falls and rapids, trout pools and shaded banks; the numerous sphagnum bogs (old glacial lakes), as well as the



A COTTAGE IN THE PICTURESQUE CHÂLET STYLE
Broad White Clapboards below and Brown Undressed Hemlock Boards above
Property of Walter P. Stokes



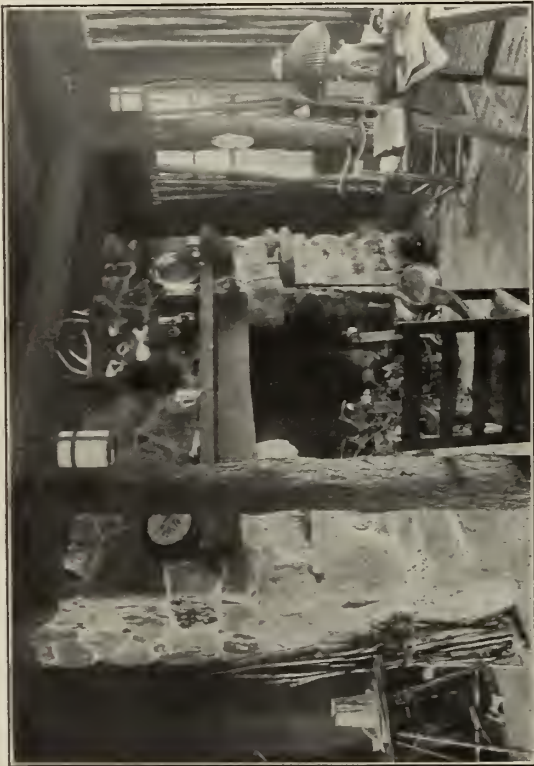
Living-Room of Abram Stratton's Cottage

INTERIOR EFFECTS OF MOUNTAIN FIELD STONE AND NATURAL-FINISHED WOOD



Dining-Room of John Bushnell's Cottage





In Samuel L. Smedley's Cottage



In S. B. Saylor's Cottage

CHARACTERISTIC LIVING-ROOMS OF POCONO MANOR COTTAGES



In George Abbott's Cottage



In Katherine Abbott's Cottage

wooded hillsides and more barren hill-tops: each of these has a peculiar fauna and flora of its own, which present to the biologist a field for observation full of variety and interest.

The cottages have been mostly built by their owners, and represent individual tastes and requirements. They range from the simplest cabin, where hungry campers make cheer about an oil-cloth-covered table, to the more substantial quarters of the city-bred, whose "Wilderness were Paradise enou"—when accustomed luxuries greet them on every hand! "All have not the same digestion, or the same sight of things." But for the most part the cottages are simple, unplastered mountain cabins, built of shingles or slabs, with stone chimneys and overhanging eaves. Their furnishings are attractive, but inexpensive, calculated to reduce housekeeping to its primal elements. Many persons take their meals at the Inn, but for those who prefer a home table ample provision is made.

The social life naturally centers about the hotel. Those unfamiliar with the Quaker garb and speech love to chat with the sweet-faced, white-capped, demurely dressed "elderly Friends," whose well-turned sentences contain many pithy thoughts. She may be "all that the truth requires in plainness of speech, behavior and apparel," but in subtlety of manner, dexterity of expression and sly humor our "woman Friend" can rival her more worldly sister. Even the ministers are not averse to a quiet joke.

In the spacious Assembly Room there is a well selected library of several hundred books, and here the Friends hold meetings for worship on "first-day" mornings, where all are made welcome. "Wouldst thou know," says Charles Lamb, "what true peace and quiet mean, wouldst



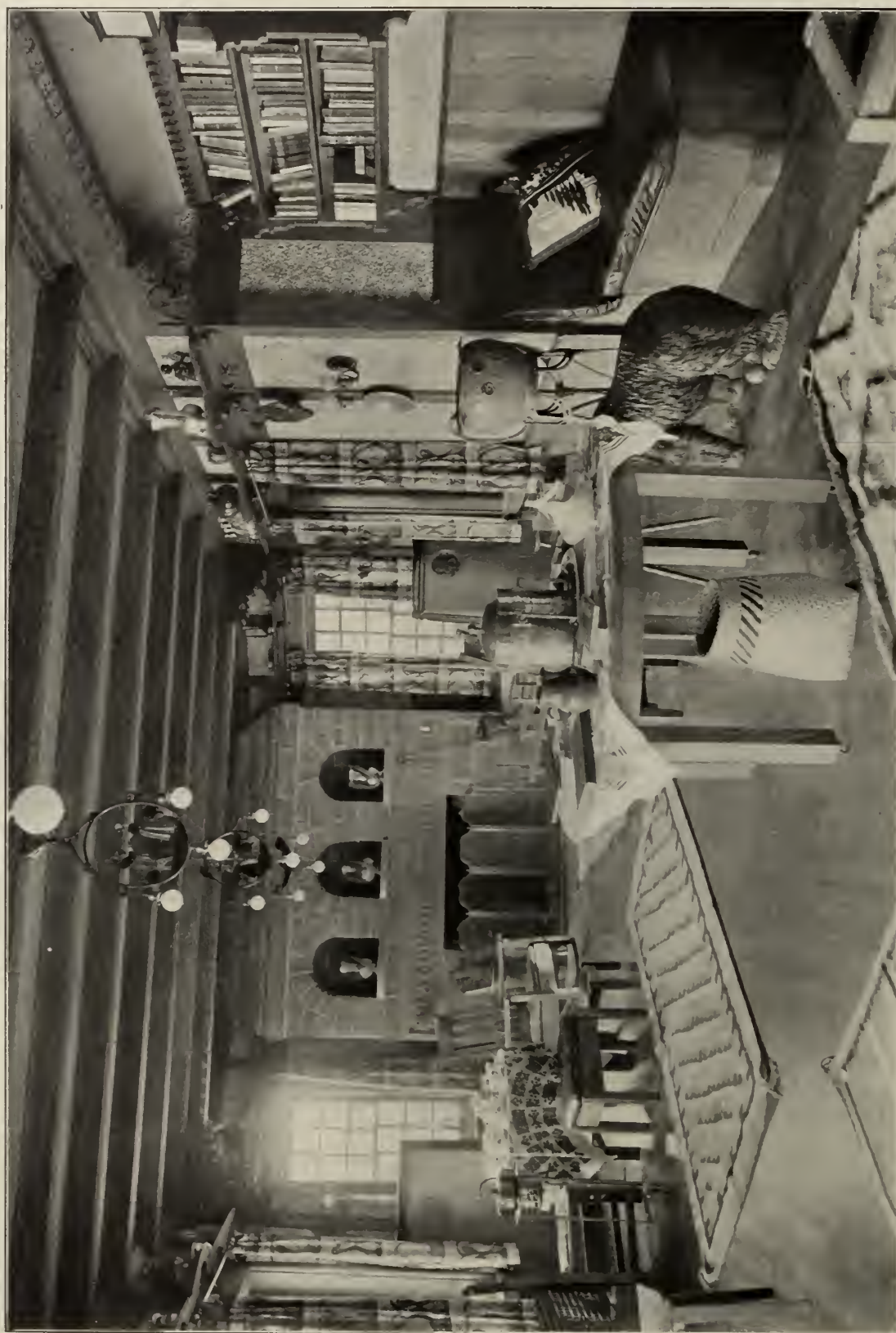
A SHINGLED COTTAGE AT POCONO MANOR
The Property of Comly B. Shoemaker

thou enjoy at once solitude and society, wouldst thou be alone and yet accompanied, come with me into a Quaker meeting. For a man to refrain even from good words and to hold his peace, it is commendable; but for a multitude it is a great mastery."

It was to the Philadelphia Quaker that Charles Wagner turned for his exemplification of the simple life, and among them he claims many warm friends. Here in their mountain retreat, where it must be confessed the simplicity is not unattached from material comforts, the Quaker may be seen at his best, and here he is glad to welcome such of the "world's people" who care to come.



MOUNT POCONO AVENUE, A TYPICAL ROAD AT THE MANOR



THE LIVING-ROOM OF A COMPLETELY EQUIPPED CHILDREN'S PLAYHOUSE

On the Estate of J. Levering Jones, Esq., at Wissahickon Heights, Philadelphia

George T. Pearson, Architect

Playhouses for the Children

BEAUTIFUL AND NOVEL STRUCTURES ON THE PRIVATE ESTATE DEDICATED TO
PASTIMES OF THE LITTLE ONES

BY CARL HOBEL

THE building of it is a splendid miracle. Since infant man essayed to divide himself from outdoors by a wall, and from the sky by a roof, his building art is become indeed a sort of necromancy. Magical are the lumber, brick and stone piled in the midst of all outdoors, and magical the touch that shapes them into a shelter where he can enter indoors and look out through his own handiwork. Far from being unaffrighted by the mystery, the child makes the best of the eventful building of his playhouse. The lumber pile is a



AN EFFECT OF VINE-CLAD SHINGLE

marvelous plaything; the carpenters' tools the most gorgeous toys. The nail keg is full of entertainment, for which the price of rent breeches is not to be thought of. The laying of the joists is celebrated by a tumble through them. A spoiled frock announces that the mortar-bed has been made.

When all is finished the little master struts proudly within his miniature castle and feels the thrill of commanding his ramparts and drawbridge.

All the knights and ladies entering his hall shall be of his own choosing, his heart and hearth shall



A COMPLETELY EQUIPPED CHILDREN'S PLAYHOUSE
On the Estate of J. Levering Jones, Esq., Wissahickon Heights, Philadelphia



TWO VIEWS OF THE KITCHEN IN A COMPLETELY EQUIPPED CHILDREN'S PLAYHOUSE
(See preceding pages)





A PLAYHOUSE IN THE EARLIEST AMERICAN STYLE BUILT FOR THE CHILDREN



A DELIGHTFUL RUSTIC EFFECT

On the Estate of William Ellery Bright, Esq., Waltham, Mass.





A PLAYHOUSE IN THE LOG CABIN STYLE
On the Estate of Alba B. Johnson, Esq., at Rosemont, Pennsylvania



A PLAYHOUSE AND BOATHOUSE COMBINED
On the Estate of W. B. Dinsmore, Tuxedo Park, New York

BOSTON
PUBLIC
LIBRARY

welcome weaklings from without, and there shall be a firm finger pointing the door to all evil spirits, hobgoblins of discontent and their untoward ilk. Within, there shall be highjinks unending; and fun, unloosed by parents' nervous solicitude, shall forever fill and march and dance on this new-built stage, where the drama of Lilliput moves apace with scenes changing as frequently as the hours, and where there are no long waits between.

In building a house for a family, why should not all members of it be considered, and with other thought than providing for eating, sleeping and the necessary daily routine? The plans will include probably a den, billiard-room or smoking-room for the head of the house; and the mother is to have her music-room, sewing-room or studio; why should there not be a playroom for the girls, a shop for the boys, a nursery for the little tots? And not all of these made into one room, but consisting of as many rooms as have been named. For the child's enjoyment, and for his growth by self-instruction, are they assuredly needed to complete a happy father's home for himself and his own.

There must be a place for sport, the quantity of which may be surmised, the kind as unforeseen as the outbursts of play that roll down the memory of childhood and stay in its sunlit path forever. You have only to dedicate a little structure to the child and he will turn it to fabulous account.

A playhouse is a nursery apart from the house for those still in frocks as well as for those who have outgrown the hobby-horse.



A PLAYHOUSE AND BATH HOUSES UNDER ONE ROOF
Marblehead Neck, Mass.

Even for the old folks it beguiles many an hour. Like those of the guest-lodge, its revels disturb none of the serenity of the family home; but they are not the worse for that. In fact, old and young win contentment and comfort from temporary separation.

In style of architecture the playhouse should



A PLAYHOUSE, BATH HOUSE AND BOATHOUSE COMBINED
On the Estate of Ezra C. Fitch, Esq., at Manchester, Mass.



A PLAYHOUSE IN THE COLONIAL STYLE

On the Estate of Mrs. Thomas Ewing, Jr., Yonkers, New York

be similar to that of the larger house only if the two are located near each other where both may

be seen at the same time. This, however, is to dress the children in the clothes of their elders;



A SECOND-STORY HALL WITH "INTERIOR DECORATIONS" BY THE CHILDREN
Playhouse on Mr. Shaw's Estate

and it is better far to remove the children's domain from sight of the house by means of shrubbery, while still having it within earshot, than to make the youngsters parade in the garb and manners of the front lawn. Since the young folks' house is to serve many a spontaneous and nondescript purpose, it may be informal, in a way indescribable; grotesque,—if you will,—and as picturesque as if it had come from the leaf of a fairy tale torn out and handed the carpenters. To construct a house from a description in the children's favorite story, determined by vote, is a happy conceit, and sets up a milestone, as it were, in the literary tastes of childhood.

At the seashore a deckhouse from a ship or an old boat can be

turned to account, with no poorer precedent and association than the Peggotty home in *David Copperfield*. In the mountains, a log cabin appeals to the child's imagination as it appeals to its elders' sense of the fitness of things. In almost any locality a rustic exterior is attractive, but the inside should always be finished neatly smooth and varnished.

Sometimes it is possible to combine the playhouse in a group with the greenhouse, the gardener's cottage or the formal garden; but this should not be taken as an excuse to make the children's quarters a part of some other structure. It only serves to avoid scattering small buildings over an estate.

Needless to say, the garage is not a suitable companion for the playhouse, nor is the stable; but it



THE LIVING-ROOM OF THE PLAYHOUSE SHOWN BELOW

may well keep company with the family summer-house.



A PLAYHOUSE WITH A GARDEN SETTING
On the Estate of Henry W. Shaw, Esq., at Magnolia, Mass.

BOSTON
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KITCHEN OF THE PLAYHOUSE ON MR. SHAW'S ESTATE

The first example illustrated stands near a greenhouse. Another, located near a bathing beach has bathhouses under the same roof. Another at the waterside includes a bathhouse and, at the water level underneath, accommodation for boats. In other examples the children are entirely in command of the house and its surroundings. The log-cabin gives, for very little money, a deal of entertainment for the child and instruction in building, for in this process he can actually help. The playhouse beside a formal garden shows a capital environment for the children's sport, so

long as some amount of lawn is given them. A parterre of the garden can be theirs and the first lessons of horticulture taught. The playhouse at Wissahickon Heights displays the limit of completeness, containing, as it does, a splendid living-room and a perfectly equipped and sanitary kitchen.

To classify playhouses, however, is futile and contrary to the diversity, variety and ingenuity they should exhibit. If your architect will but follow the child's imagination in one of its happy sallies, he will obtain ideas enough for a dozen structures, the cost of which will range, as the illustrations show, from sixty dollars to six thousand dollars. But in the success of the

playhouse, cost plays almost a dummy hand, for the child's joy of ownership is not yet measured in terms of dollars, nor even cents. His little house is a realm of his fancy, and he sees it as he will, not as you will. He takes no note of economies his builder may practice on him; crudities of furnishing are gorgeous in his eyes. Enough if the playhouse give him the responsibility of care that leavens the pride of possession, and if it begin the lessons of cleanliness, orderliness and the respect for what others have wrought which prevents destructiveness and awakes constructiveness.

THIS cottage in an Alpine village is one of many dwellings in the Old World admirably suited for adaption to the new. Grace of form and outline is, perhaps, the secret of its charm. If built in this country, the smaller windows would probably be somewhat en-



larged, but it may be doubted if any alteration would be needed in the balcony formed within the gable of the second story,—a delightful outdoor sleeping-place. The roof at the extreme right could easily be extended in order to cover a veranda on the ground floor.

A Mansion with Formal Surroundings

DESIGNED IN THE MODERN ENGLISH STYLE

“Marsh Court”
Stockbridge, Hants
E. L. Lutyens, Architect

The Seat of
Edward Johnson,
Esquire

THE opportunity of designing all the fittings, the decoration and the furniture of a building, as well as seeing the structural parts carried out, does not come to architects as often as it should. It is the fate of architectural work that it has usually to battle either with uncongenial surroundings, as is often the case in towns, or else be filled up with unsuit-



THE BIG CHIMNEYS OF THE WEST FRONT

able furniture and decorative objects alien in every way to the character of the building in which they are placed.

The craftsman's work, and the painter's, too, suffers from the same disabilities; but in their case the work can more easily stand its ground; it is smaller, it is more "cabinet," and its self-reliance is the more effective for being aggressive. If architecture were



THE ENTRANCE FRONT OF "MARSH COURT"
In the Foreground is the Bridge which spans the Moat



THE WEST TERRACE OF "MARSH COURT"

The Walk is made of Tiles set on edge within Panels formed by Limestone



A PORTION OF THE SOUTH FRONT

Showing the Chalk-faced Walls of the House and some of the Compartments of the Formal Garden

to be thus sufficiently self-assertive, to the point of compelling neglect of its neighbors, one should reject it as a piece of bad art; on the other hand, if one can make the layman feel how much more admirable his dwelling becomes by being dealt with as a whole, both without and within, he will soon learn to value all the more the simplicity of a homogeneous result, where neither the building nor its furniture, nor even, sometimes, the household gods, have had to submit to one another.

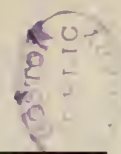
It is not necessarily a matter of greater expense



THE STAIRCASE OF OAK

to achieve this end, the varieties of style, and no-styles, are nowadays so endless that even from stock patterns it is possible to find furnishings which will tally with the general architectural idea without entailing a prohibitive outlay even in the humblest of schemes.

The scheme of "Marsh Court" can hardly be called a humble one; nevertheless we get here this singlemindedness in design, though on a grand scale, carried out with perfect consistency and stamped with the strongest personality and character. This quality runs through



THE SALON OF "MARSH COURT"
The Floor and Punctured Walls of Oak; Stone Columns and Frieze of Carved Chuk; Ceiling of Molded Plaster

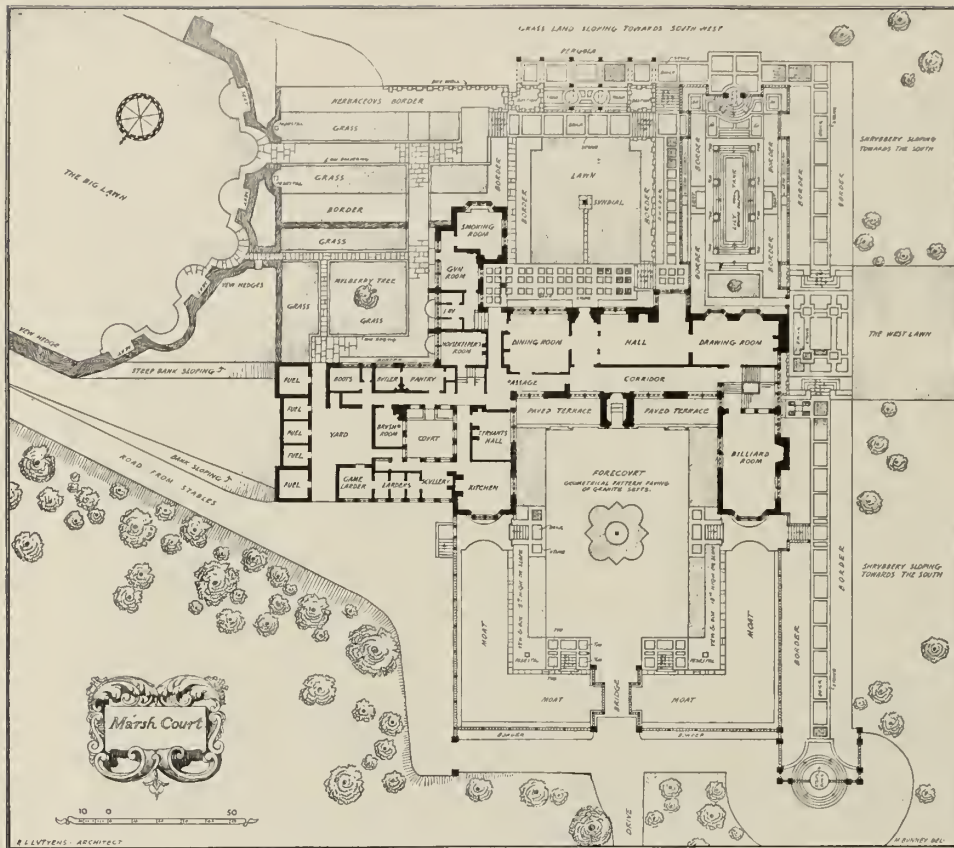


THE ENTRANCE HALL



THE UPPER GALLERY

BOSTON
JULY 1911



PLAN OF THE MANSION AND ITS GROUNDS

everything, from the simple lay-out and the masterly arrangement of materials to small items like the delicate metalwork of the lock plates and the easy refinement of the furniture. All this is achieved with reserve, absence of effort and, what is more impressive, with no sensible adherence to style. Each detail seems so indispensable to the whole that to conceive its absence would be an offence against the simplicity, reason and perfect sense of fitness that characterize this noble piece of work. Looked at as a whole, it would be hard to point to anything quite in the same class in British domestic architecture since Mr. Norman Shaw's best time.

Marsh Court stands on the edge of low down-like chalk hills that shut in the valley of the Test, Hampshire's most famous trout stream, that here meanders along a broad and marshy bed. The actual position of the house is on a spur projecting beyond its fellows and facing southwest down the valley, over which there is a fine prospect. The spur itself is quite small, and the plateau at the top is filled by the house and its gardens, so that round the three sides there is a rapid descent to the marsh land below,

but this circumscribed area is so well managed that the gardens seem in no way disproportionate to the house.

The spacious entrance courtyard on the north front, partly enclosed by the projecting wings, is ingeniously paved with stone and granite "setts" of varying sizes laid on edge and to a design radiating from a geometric grass parterre in the center. Facing the ends of the wings are stone balustrading and steps enclosing small sunk gardens, while on the west side of the court and house is a long paved terrace at a still lower level, finished at the northern end with large flights of steps and stone piers possessing considerable architectural character.

On the south side of the house the different compartments of the garden are full of interest, and there is a specially charming sunk garden enclosed in high retaining walls of brick. In it are several water basins, skillfully set out, terraces and pavings in stone, tile and brick and two fine cast-lead tanks. This small garden, with the white stone front of the house towering up above it, makes a very effective piece of work.

The house itself is faced with chalk, quarried in the locality, but, here and there, tiles, brickwork and split black flints are worked in to emphasize features or to lead up to the total transition to brick and tile on chimney stacks and roof. The chimneys of the west front are made strikingly prominent and stand up in a most imposing way, they are in one sense the most traditional part of the whole design and, with their twisted and cut brickwork and tile crow-rests, are typically English stacks. Their treatment is in every way a success.

One cannot help feeling that this piling up of simple and well proportioned building is more impressive than the rather cottage-like work on the other fronts, for there the scale is per-

haps a trifle too large for the type of building adopted.

The general arrangement inside the house is extremely simple, a long gallery on each floor, and extending the full length of the north front, gives access to a suite of rooms facing south. Central among these is the hall. This is a fine room carried up higher than the rest of the rooms on the ground floor and elaborately paneled with oak. The surface of the oak has been carefully treated with a solution of lime to bring out as soon as possible the charming quality and bloom possessed by old oak that has never been varnished or stained, and thus it tones very well with the warm grays of the Sussex marble in columns and chimney-piece, while the remarkable friezes of carved chalk over the recesses at each end of the room seem to help to blend together the ceiling and the walls.

Another specially fine feature of the interior is the upper gallery, reserved and austere, almost monastic in its juxtaposition of paneling and white plaster. The construction here is clever and effective, for this gallery is lower by many

feet than the floors of the bedrooms, so that each little suite of chambers has its separate stairway, making the gallery less like a corridor or purely passage room than is usually the case.

The details of the woodwork in this part of the house and on the staircase are particularly good and show the unerring instinct which Mr. Lutyens possesses of giving his work a touch of originality, while never placing it out of harmony with the best traditions of English work.

Throughout the house, however, the same solid reasonableness which was so essentially the quality of English work of the past, dominates everything and gathers together without any sensible jar the great Tudor stacks, the mullioned windows, the delicate plaster work of the great bedroom and the stately classic paneling and ceiling of the hall. It all enforces the unanswerable maxim that if once the spirit pervading architectural work be right and sound, styles go for little and their mingling be as much without offence to æsthetic laws, as it brings a special charm to buildings of this kind.

M. B.

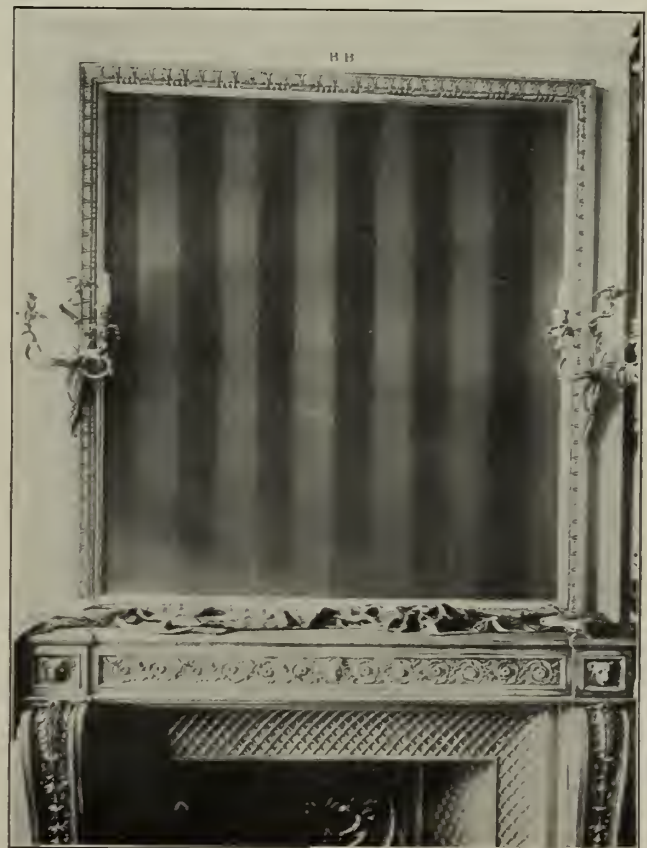
Paper-Hanging in Panels

BY A. BRYANT PARKER

IT has come about that the better sort of wall papers, imported to help make the American house beautiful, are again hung in panels, and this return to the correct principles of mural decoration is mainly due to the influence of recent architectural achievement, followed by an intelligent decorative treatment of interiors in the styles or the periods indicated by the work of the architects.

After all, doorways and windows are symmetrical panels, scaled and balanced in proper proportions to the dimensions of a room, and so the simple and rational method of decorating the wall surface is to carry out the idea suggested by the constructive features.

The room paneled in wall papers is good from an artistic point of view, presenting a series of framed decorative pictures, while not the least advantage of this style of wall decoration is the sanitary feature; in the treatment of bedchambers, for instance, after the panel moldings of wood have been fixed and the ceiling has been tinted in distemper, the wall spaces around the panels and



VELVET PAPER WITHIN A WOOD PANEL

the moldings themselves are painted in oil color, toned to suit the woodwork or the background of the paper itself. This obviates the use of paper in the corners and above the base board, and renders the walls practically washable, excepting the panel surfaces, which are easily cleansed by a dry process.

The infinite variety of decorative effects to be had in connection with the use of wall paper in panels is, of course, apparent to the skilled designer, but the simplicity of execution must commend itself even to the amateur who is disposed to dispense with the services of the professional decorator.

French and English wall papers, conceived and carried out on the lines of the classic decorative periods, are all intended for use in panel form, being complete in design without the necessity of frieze or border to produce a finished effect. A large variety of the foreign wall papers is matched by linens, taffetas, chintzes and cretonnes, so that an entire room may be decorated and upholstered without change of pattern or coloring.

For the drawing-room papers are used simulating a velvet surface, or showing the design in relief of silk flock on a background of embossed silk or smooth satin. In paneling papers of this high class, moldings of gilded wood or molded carton pierre are used, the wall spaces around the panels following in color the door and the window framings, or permitting a metallic treatment in glazed aluminum or gold leaf. The use of galloons, to finish the paper inside the panel moldings, lends a textile effect to the wall covering, and enhances the value of the decorative scheme when portières and window hangings of velvet or silk damask are used.

Dining-rooms paneled in French tapestry or Japanese leather papers may have the hardwood



PANEL FILLED WITH "VERDURE AND ROSES" PAPER

moldings suggested by the woodwork, or strips of moldings in leather effect showing metallic nail heads are sometimes employed with excellent results. For the surrounding of the panels the Cortex paper, giving a plain tapestry surface, is proper, and for figured leather effects the metallic canvas scheme is approved.

When a Japanese grass cloth or the Korean splint cloth is used for the sake of a plain effect, on the walls of a library or a music-room, panel moldings indicating a conventional treatment of the bamboo and colored in agreement with the woodwork are in character, leaving the stile spaces to be painted and stippled in harmony with the wall covering.

Halls hung with landscape papers are most effective when the panels are shortened from the lower ends to give a wainscot effect, and the use of grass cloth or splint cloth on the larger plain surfaces gives a solid and durable piece of work.

For the nursery or playroom, as it is sometimes necessary to remove the wall decorations for the cleansing or renovation of the room, the panels had best be in the form of detachable frames, and in line with this idea the Pierrot pictures are enclosed with white enameled moldings and protected with glass, while the walls are painted or hung in simple Chambray papers of light tints. The pictures are spaced in panel effect and hang flat, as though fixed to the walls.

Perhaps a strong inducement to use the panel in wall paper decoration is the manifest facility with which an interior so decorated may be changed without undue expense. Given the ceilings, the stilings and the fixed moldings already done in color harmony with the constructed details of any room, the renovation



Outdoor Corridor at the Mission San Miguel

The Mission Style in Modern Architecture

BY GEORGE WHARTON JAMES

V. The Arched Corridor or Ambulatory in Mission Days and its Modern Application

*Freshe Alures with lustye hye pynacles . . .
. . . that called were deambulatoryes,
Men to walke together twaine and twaine
To keep them drye when it happened to rayne.*

Lydgate in his "Boke of Troye."

ONE of the distinctive features of Mission architecture is the arched corridor. In the various illustrations we have seen its use in the old structures. It is equally well adapted to modern manifestations of the style.

It is an axiomatic proposition that no architectural detail can be permanent that does not justify its existence either by its utility or its beauty. Fads, whims, fancies and notions may have their vogue for a while, but only the useful and beautiful last. And, too, we are slowly coming to the recognition of the basic principle that the highest beauty is founded upon the highest utility. We do not see it yet, but we are getting to do so, that the chief beauty of things consists in the perfection of their usefulness, — their adaptation to the purposes for which they are made. And to this basic principle as a standard I subject the arched corridor for analysis.

It is able to stand the test. In the most primitive architecture of the most primitive people, the porch and veranda are found essential to comfort. The "Kish" of the Coahuilla Indian in the mountains of southern California, as well as the "Kan" of the Yumas on the Colorado River, proves its usefulness, and the fact that

the primitive architects of the Pueblos among the Hopis, the Zunis and others found a means to enjoy the shelter it afforded combined with the free entrance to the air and sunshine of the purifying out-of-doors, demonstrates that they deemed it a prime necessity of architecture. There is not a writer of any school of medicine who, to-day, does not advocate a larger life out-of-doors. Our nerve-wearing civilization demands it, for the life of the ordinary financier, business man or clerk necessarily confines him to the office a large part of the day. It is essential, therefore, that in his architecture the modern man should provide for as much life out-of-doors as he can, in order to counteract the evil influences engendered by too close application to business indoors.

The mission architects well understood this, and California's climate offered them additional inducements for the perpetuation of both the patio and arched corridor.

As I have before shown, the arched corridor offered a pleasing opportunity for the processions of the church. It is easy to picture one of these processions slowly wending its way along to the solemn chant of the priests, while Indian on-lookers bowed their heads in reverence, im-



THE ARCHED CORRIDOR IN THE MODERN CLARKE RESIDENCE
AT ALTADENA, CAL.



A MONK READING HIS BRIVIARY IN THE AMBULATORY
OF SANTA BARBARA MISSION

pressed in spite of themselves by the power of the imposing display. Yet this was but an adventitious use of the corridors. It was their daily, their hourly usefulness that commended them to the mission architects, and that commends them to us. Their broad eaves and tiled roofs gave shadow to an outdoor space beyond the building. In the hot weather, when the thermometer outside would register 110 degrees, this cooled space would so reduce the temperature within the building that it would there register no higher than from 80 degrees to 85 degrees.

In the cold and wet or foggy weather of winter the advantages of the outdoor corridor are equally apparent. The tiles and broad eaves, together with the broad surfaces of the piers, serve to keep out a large amount of wind, cold and moisture from the cloistered area, thus protecting the walls and building beyond. This secures a greater warmth and dryness and consequent comfort.

If there were no other reasons than these, they are sufficient to justify their existence, but when one adds thereto the opportunities the corridors afford for working, reading, lounging and resting out-of-doors in shade and seclusion, their utility, pleasure-yielding and health-affording advantages are doubly apparent. Who can gaze upon the venerable Franciscan monk at Santa Barbara,



INNER ARCHES FACING THE PATIO AT SAN LUIS REY

meditating upon the lovely scenery, without feeling the poetic charm as well as the usefulness of the arched corridor? Even more forcefully illustrating these points is the good brother reading his breviary, suggesting the father, the mother, the brother, the sister of the household, enjoying the cool repose of the corridor of the home.



MEDITATION IN THE AMBULATORY OF SANTA BARBARA MISSION



AN ARCHED CORRIDOR AT THE GLENWOOD HOTEL, RIVERSIDE, CAL.

At San Luis Rey, San Juan Capistrano, San Miguel and several others of the missions, not only was there a series of arched corridors on the outside of the building, but a similar series lined the inside and gave upon the patio. The remnants of one row of arches at San Luis Rey is seen in the illustration. This use of the arched

corridor afforded absolute privacy to the members of the household,—outsiders were debarred, and yet the outdoor privileges were at the same time secured. What a blessed advantage this to tired men and women of to-day as well as to monks in the past. Retirement, quiet, restfulness, out-of-door air, sunshine and bird-song, all provided by the arched corridor, combined with the patio.

The restored monastery at San Fernando largely owes its picturesqueness to the arched corridors, and the horses who pass by, walking in the “footsteps of the padres,” often show by their seeking the shade of the corridors themselves that they know how to enjoy so wise and appropriate an architectural provision.

At San Miguel, these corridors are the chief element that lifts the building from barn-like simplicity to picturesqueness.

There is a quadrangle at San Miguel 230 feet square, and one side of this was corridored, six of the pillars still remaining.

A few days ago I again visited San Juan Capistrano and there took particular note of the arches. It is an interesting fact that no two are exactly alike, thus demonstrating that if a frame were used, it was remade for each separate arch. But one of the old Indians assures me that no framework whatever was used. The piers were built and then one brick of the arch was laid, propped or wedged into



ARCHED CORRIDORS OF THE RAILWAY STATION AT BERKELEY, CAL.

place, and held there until the mortar was dry. Then others were placed, one on each side until the whole arch was completed. How true this is I do not know, though Father O'Keefe, the pastor in charge at San Luis Rey, who is directing restorations there, believes it to be the only adequate explanation of the variations.

Was it purposely or unconsciously that in the building of Southern California's first mission hotel, that of the Glenwood, at Riverside, that Mr. Arthur Benton, the architect, practically fell into the same variation that the priestly architect of San Miguel did. One of the arched colonnades on the upper story is shown. The arch at the end of the corridor is square, while those on the side are circular. It will be seen that the crown of the piers upon which the arches rest is an exact duplicate of those found in some of the missions.

That the arched colonnade or corridor is not confined in its architectural possibilities will be demonstrated by many pictures in later articles. There is a suggestion of its charm when used for a railway station in one of the depots of the Santa Fé system, at the university town of

Berkeley, Cal., and the rich growth of semi-tropical verdure without, contrasting with the creamy gray finish of the rough plaster, renders this part of the building a perpetual joy to the outsider as well as to the patrons inside, who await the arrival of their trains in shade and comfort.

In the Clarke residence, Altadena, Cal., the arched corridor lines the whole front of the building. It will be fully pictured later. On visiting it in pleasant weather (which is practically eleven months of the year), the caller is often received and entertained outside, the comfortable chairs and commodious swinging seats inviting one to remain out-of-doors in preference to going within. Being in a somewhat secluded neighborhood, after-dinner coffee, and often a light luncheon, is served here, and for the evening rest hour, or the study of the lessons of the children, it affords an admirable and healthful retreat.

Is it not apparent, therefore, from even this brief and cursory presentation of the subject, that the arched corridor justifies its existence, both in old and modern architecture, for the comfort, healthfulness, pleasure and convenience it affords?

(To be continued)



"In the Footsteps of the Padres"
(Mission San Fernando)

PAPER-HANGING IN PANELS — Concluded

becomes merely a matter of removing the covering from the panel surfaces and substituting the new conceit, while omitting the always expensive and disagreeable consequences attendant upon the process of redecoration entire.

Making due allowance for the vagaries of fashion, it may be said that the revived idea of panel decoration, as applied to the use of paper-hangings and textiles for walls, will prevail just as long as the architecture of the period demands this style.

Hedges for the Country or Suburban Estate

PRACTICAL ADVICE ON THE MOST RELIABLE SPECIES TO USE AND HOW TO PLANT THEM

BY ERNEST HEMMING

THE tendency of taste in landscape gardening of late years has been rather against the use of hedges, fences and barriers of all kinds for enclosing property. It is not at all uncommon to see whole communities without a line of any kind to denote where one property begins and another ends, so that each residence appears to be set in the midst of spacious grounds. There is no question that this method of treatment is much better than the old-fashioned one of enclosing each individual piece of property with an unsightly fence, which had its origin, no doubt, in the necessity of keeping out stray cattle. In many localities, especially the suburban residential portions of large cities, the need for such boundaries no longer exists. At the same time a hedge gives a sense of privacy and seclusion and possession so dear to the Anglo-Saxon heart. Our illustration of well kept Californian privet hedges around a number of adjoining properties will perhaps enable the reader to judge for himself which style of landscape gardening he would prefer, this or the park system where the entire community is treated as a whole.

Hedges and fences we must have, so let them be as ornamental as possible. In addition to

their value for enclosing properties, we need them as an ornamental feature on the home grounds. There is something wrong with the landscape design that will allow of the cabbage patch appearing as if it were a part of the lawn or 'a formal garden to be set in perfectly natural surroundings without a line of some kind to mark the merging of one into the other. Here is where a hedge often becomes a necessity. First be sure one is needed and then procure the most suitable from every point of view. In England, the land of hedges, they are often dispensed with where they would obstruct a desirable view, the sunken fence being used in place of them. This consists of an excavation about six feet deep, with the side nearest the house or point of view supported by a retaining wall and quite perpendicular, the other side sloping out to an angle of about forty-five degrees. Viewed from a little distance the lawn and adjoining fields appear to be one and the same, yet cattle or sheep are effectually prevented from trespassing on the lawn.

The list of plants that may be used for the purpose of making hedges is not a very extended one, yet a hedge plant suitable for a given position can usually be found.

The way in which a hedge is set out has more to do with its success than the choice of plant. Do not spare labor or expense in planting a hedge, for an unthrifty one full of gaps is worse than none at all. More than likely the hedge will be planted in ground that has never been cultivated, perhaps not properly drained, or it is so dry and impoverished that hardly anything will grow. If this is



HEDGES OF CALIFORNIAN PRIVET
Enclosing Suburban Properties



A HEDGE OF BOX ON A LONG ISLAND ESTATE



JAPANESE BARBERRY BORDERING A DRIVEWAY

BOSTON
PUBLIC
LIBRARY



PRIVET AND BOX USED IN THE FORMAL APPROACH TO A HOUSE

the case you cannot expect to have a hedge that will be a source of satisfaction.

PLANTING HEDGES.

We will consider the planting under two groups, deciduous hedges, or those which lose their leaves in the winter, and evergreen hedges. The former are most often used and include Californian Privet, Berberis, Osage Orange and Hawthorn. The best time to plant these is in early spring as soon as the ground can be worked to an advantage. Do not use too large plants. The average person is too impatient and wants a full grown hedge as soon as he has decided to have one at all. This is impossible if quality is to be the first consideration.

Plants two to three feet high for Berberis; three to four at the outside for the others is as large as is advisable to set out. As soon as the plants are set cut them down to within six to twelve inches of the ground. The plants will then all begin to grow at once and get a uniform

start. In addition to this the cutting down will insure the hedge being well filled at the bottom.

If you are in a hurry to get a high hedge aim to get it by good planting and attention to encourage vigorous growth, rather than by setting big plants and not cutting back.

Dig a good wide trench, even for small plants. Eighteen inches wide and as deep is little enough. Put in some well-rotted manure mixed with good top soil; soil that is taken from over a foot below the ground is not of much use. When the trench is filled up to the right depth set the plants in line in the middle of it, spread the roots out flat, fill up with good soil and press firmly around them. A mulch of well-rotted manure is always beneficial as it keeps a uniform moisture.

In estimating the quantity of plants required, allow about one to the foot for a single row; or if a very wide hedge is wanted a double row with about twelve inches between the rows and fifteen to eighteen inches between the plants may be allowed.

PLANTING EVERGREEN HEDGES.

The same rule should be followed for evergreen hedges except in the cutting back and the distance of the plants apart. Hemlock, Norway Spruce and Arbor vitæ make the best evergreen hedges. Seedlings of these plants from twenty to twenty-four inches high can be set about twelve inches apart.

Larger plants, say from two to four feet high, that have been transplanted, may be set from eighteen inches to two feet apart according to the bushiness of the plants. Do not cut evergreens back,—only a light shearing or pruning to make them all uniform is necessary after planting.

May, perhaps, is the best month of all the year for planting evergreen hedges.

HEDGE PLANTS FOR SPECIAL PURPOSES.

The Californian Privet makes the best hedge for localities where it is hardy. It thrives exceptionally well near the seashore. There are many

beautiful examples to be seen along the New Jersey coast and at Newport, Rhode Island, growing almost down to the water's edge. It will thrive in almost any position where the ground is not too wet and heavy. If planted in wet soil that is retentive of too much moisture the wood does not seem to ripen properly, and there is always a danger of a severe winter killing it. Latitude does not seem to have much to do with its hardiness. It will occasionally be found winter-killed in Maryland, yet will survive in some localities in New York State without the slightest injury.

Privet hedges may be planted from the time the frost leaves the ground until they come too far out in leaf. Successful plantings have been made in May, even as late as June, but of course much depends on the rigor of the season.

Old privet hedges that have become uneven and in poor condition may be cut down to within a foot of the ground in April; they will quickly bush out and make a new hedge.



A HEMLOCK HEDGE BESIDE A WALK

The Ibota, Regels and English Privet are all good hedge plants, but do not make such attractive hedges as the Californian, although the first mentioned is considered to be much hardier and is being used where the Californian Privet has not proved hardy enough to stand the winters.

Every one who has seen the Hawthorn hedges of England knows what a fine hedge the *Crataegus oxyantha* makes. Unfortunately, owing to extremes of heat and cold, principally the former, in this country it is very subject to disease and cannot be relied upon. *Crataegus crus-galli* or Cockspur Hawthorn is perhaps the best for this country. It has very large thorns and makes a good defensive hedge that will turn cattle. It is somewhat subject to San José scale, like all the thorns, and should be watched on this account, and sprayed should occasion require.

The Osage Orange since the advent of the San José scale is proving a failure, as it is so extremely subject to attacks of this pest. At its best it is a very rank growing plant and should only be used where an impenetrable barrier is wanted. It is better adapted for fields than the home grounds.

The Japanese Barberry (*Berberis Thunbergi*), cannot be excelled for a low growing, ornamental hedge. The plant is naturally very bushy right from the ground, and has an extremely graceful and pretty habit. If allowed to grow without too

close shearing it forms a hedge as broad as high, the limit being four to five feet. It is attractive all the year round. In the fall it bears a crop of scarlet berries, which hang on nearly all the winter. It is best adapted to dry or rather well drained positions, such as on the top of banks or retaining walls. The illustration will give an idea of its possibilities.

The common Barberry, or *Berberis vulgaris*, is more upright in growth and attains a little greater height. There is also a red leaf variety. Both are good hedge plants and not used as extensively as they should be.

ORNAMENTAL FLOWERING HEDGES.

Almost any free growing shrub of bushy habit may be used for a hedge. The possibilities for attractive features on the home grounds along this line are unlimited. All that it is necessary to know is the habit of the plant and how to prune accordingly. If flowering shrubs are used, such as *Hibiscus Syriacus* or *Hydrangea paniculata*, they may be cut back every winter, as they flower late in the summer on the wood that is made the same year. But if spring flowering shrubs are used, such as *Deutzia gracilis*, *D. Lemonei*, *Spiræa Van Houttei*, Snowball, *Rosa rugosa* or *Pyrus Japonica*, all of which make splendid hedges, it must always be kept in mind that the flowers are borne on the growth that is made the year previous, and pruning

must be done accordingly. Let the hedges assume the form of the natural habit of the bush, whatever it may be, merely keeping the straggling growth shortened in, and there will be a wealth of bloom yearly, as shown by the illustration of the Snowball.

EVERGREEN HEDGES IN GENERAL.

These are attractive both summer and winter. The Hemlock perhaps is the leader, as it forms such a dense compact barrier. Being well adapted to rather dry, stony ground, it can



A HEDGE OF OSAGE ORANGE BESIDE A COUNTRY ROAD

often be used in a position where other kinds would not be so likely to thrive. Of course it is very necessary to give it a thorough and careful planting so as to ensure its making a good start.

If a tall, slender hedge is wanted the Arbor Vitæ is the best. The Norway Spruce is also good where a large screen is needed.

For choice low, ornamental hedges any of the compact low growing evergreens may be used, providing they are hardy and suitable for the position.

Always begin with small plants; if large ones are used they are liable to lose their lower branches, and then it is a hopeless task to try and get them to fill in, for evergreen must not be severely pruned, as they will not break from the old wood. Shear after they have made their new growth in May or June. In the winter evergreen hedges should be watched during heavy snow storms, to pre-

vent the snow lodging upon them and breaking them down.

The Boxwood is generally used more as an edging, but it would not do to close without mentioning it, as it is occasionally to be seen of magnificent proportions, as in the illustration, but such a result is not likely to be obtained in less than half a century.



A HEDGE OF JAPANESE SNOWBALL IN BLOOM



A CALIFORNIAN PRIVET HEDGE IN A FORMAL GARDEN



THE HOUSE FROM THE FORMAL GARDEN

Estate of Marshall P. Slade, Esq., at Mount Kisco, New York

Charles A. Platt, Architect

A New House in an Old Style

THE COUNTRY SEAT OF MARSHALL P. SLADE, ESQ., AT MOUNT KISCO, NEW YORK, WHICH
REVIVES MANY OF THE BEST TRADITIONS OF THE AMERICAN COUNTRY ESTATE

IN ancient French châteaux and farms in one salon windows look on poultry yards and stalls. Furbished living-rooms in Holland command views of cabbage rows. Drawing-rooms in England have vistas down the *tapis-verts* of parks. Early American houses had for their immediate landscapes, in the South, expanses of immense plantations; in the North, broad lawns of natural topography, shaded by trees and shrubs gardeners knew how to cultivate, if not to select and locate according to theories of landscape architecture. White paling fences or other definite boundaries enclosed and determined the domain of the house.

A garden, somewhat formal, was a much prized though incidental feature of the estate, incidentally regarded, if one may judge from its being given a location of secondary importance. Windows, though embowered with flowers, were not usually given a view of the garden parterres. These parterres were located at one side of the house, near the kitchen-wing and the offices, sometimes, beyond a barrier of hedge, where the housewife, directing her laborers, could tend her flowers unseen. The garden must have been sought to be discovered.

Nowadays, the garden occupies first place, where it sits in high estate, spreading its gorgeous robes to welcome the guest before the front of the house, or sweeping them across the rear to be beheld from every room and enjoyed by the family in the domestic peace it obtains in betaking itself away from the highroad. This latter-day value set upon a garden as an accompaniment to the house is shown at Mr. Slade's country seat at Mount Kisco, New York, and the foregoing remarks on the typical conditions of the American estate apply to it in some measure, as the architect has applied his art to those conditions and himself to provide a new means for fulfilling them which shall be even better than the old.

How simple the means are. How little has he strained after effect or introduced self-conscious innovations of his own. At first glance the house might be taken for an old one, of the sort found in inland towns east of the Hudson River, yet no house in particular can be named which this one reproduces. And therein the skill of the architect lies, for he has re-used the characteristics merely which mark an early type of house: in some ways he has better used them.



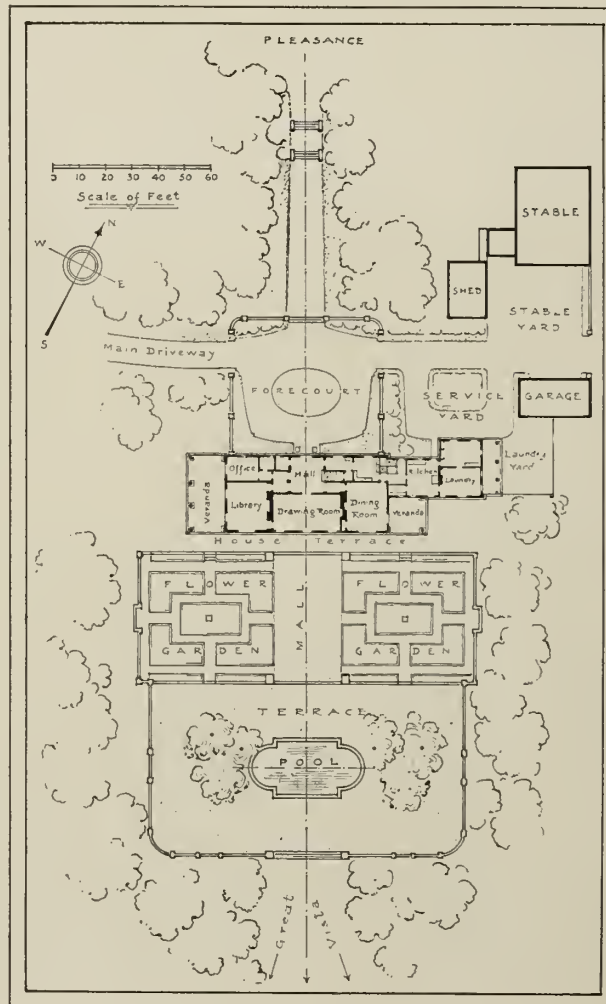
THE SOUTHERN FAÇADE OF MR. SLADE'S HOUSE



THE DIGNIFIED APPROACH THROUGH A FORECOURT WITH WALLS OF CEMENT

"True taste," it has been said, "is an excellent economist. She delights in producing great effects by small means." If then the "great effects" in a country house are sobriety, dignity and repose, added to that quality which declares without that the house is comfortable and cheerful within, the means which produce this end are to be valued as much as their result is to be admired. The actual materials employed are of secondary importance.

A floor-plan, without irregularly jutting wings, comprised within a rectangle and the length of the house and corresponding long ridge-line of a roof without gables intersecting it, give to the house illustrated here its sense of firm-footed repose. Contributing most to this



PLAN OF THE HOUSE AND GROUNDS

end is horizontality, and this is pleasantly played upon by the system of vine trellises upon each façade, with the tall, narrow shutters crossing them only to give the repose produced by repetition. The two-storied verandas at each end afford liberal outdoor living-rooms. Their upper floors may become nurseries or sleeping places.

The windows of the principal rooms see a finer thing than poultry-yard or cabbage row. It is a garden that lies immediately below them, making the foreground to a view which passes soon into the rural. Lawns are also here, forming backgrounds, as it were, to the parterres, perfect backgrounds where the eye seeks rest and whence the flowers borrow the beauty of contrast.



THE DRAWING-ROOM WITH WALLS COVERED WITH GRASS CLOTH IN PANELS



THE BROADLY PANELED DINING-ROOM

ASTORIA
SUPPLY



LOOKING FROM THE HOUSE TOWARD THE VISTA THROUGH THE WOOD

Beyond the garden is a lawn enclosed by a low cement wall and having as a centerpiece a serene pool, the more impressive from its being undorned. Along the boundary wall are seats where one may enjoy this stretch of grass, which on the one hand is a foil to the gayety of the flower garden, on the other a logical stage in the transition from formal architecture to free-growing Nature. Regard for natural conditions, the proportion of parts, the study of distances, in a word the skillful use of space is to be



A BOUNDARY OF THE GARDEN

observed in the entire environment created for the house.

The gardens are laid out in axial relation with the house, and each stage of the garden is virtually a terrace that descends in going outward toward the rural surroundings. The axis of the gardens, continuing beyond the lawn containing the pool, is lost in a great vista disclosed by a cutting of a cleft in the woodland.

A forecourt for visitors upon the "stranger front" of the house is entered by the main carriage drive, while through

an opening opposite the entrance doorway a turf walk leads one to roam in seclusion. Such postern gates to the natural beauties untouched in the development of the estate, the dignified approach, the broad verandas, flowerbeds wedded to the very rooms, distant lawns ending in views of extensive plantations: these in the newest estate at Mount Kisco recall and merge the most revered traditions and beautiful attributes of the American country seat.



THE LIBRARY OF MR. SLADE'S HOUSE

Order and Disorder

SHOWING THE ADVANTAGE OF SYSTEMATICALLY ARRANGING THE GROUNDS OF A SUBURBAN PROPERTY

BY HERBERT J. KELLAWAY

Author of "How to Lay Out Suburban Home Grounds"

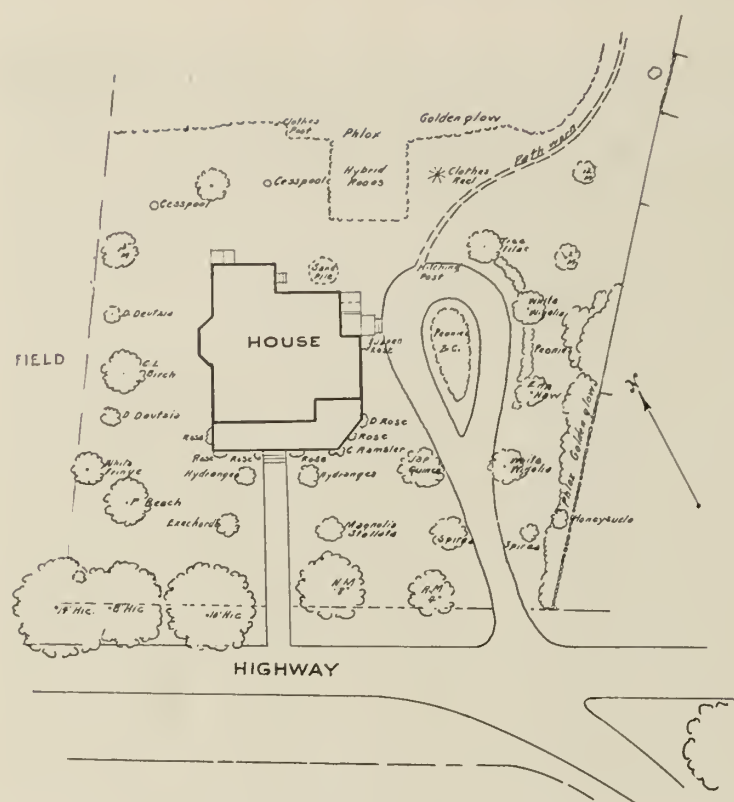
WHAT SHALL I PLANT is the thought in spring and fall of the man with a desire to improve his grounds. Often his attempts to answer the question only add to the general disorder and untidy arrangement of his property. Frequently, the choice of plants is made from the fact that, in some well-arranged estate visited, a particular tree or shrub attracted his attention, and the desire to get the same result is attempted at home, notwithstanding the fact that the association of the plants, the arrangement of the plantations, the disposition of the lawn spaces, walks and drives contributed to the result admired as a whole, and without these there would be no result at all. Often a Colorado blue spruce, a purple beech or some exotic plant—all good in their proper place—will occupy the center of what otherwise would be a fine lawn. Trees are planted indiscriminately, the house is shut in and

the grounds present no general studied treatment only the accident of disorder.

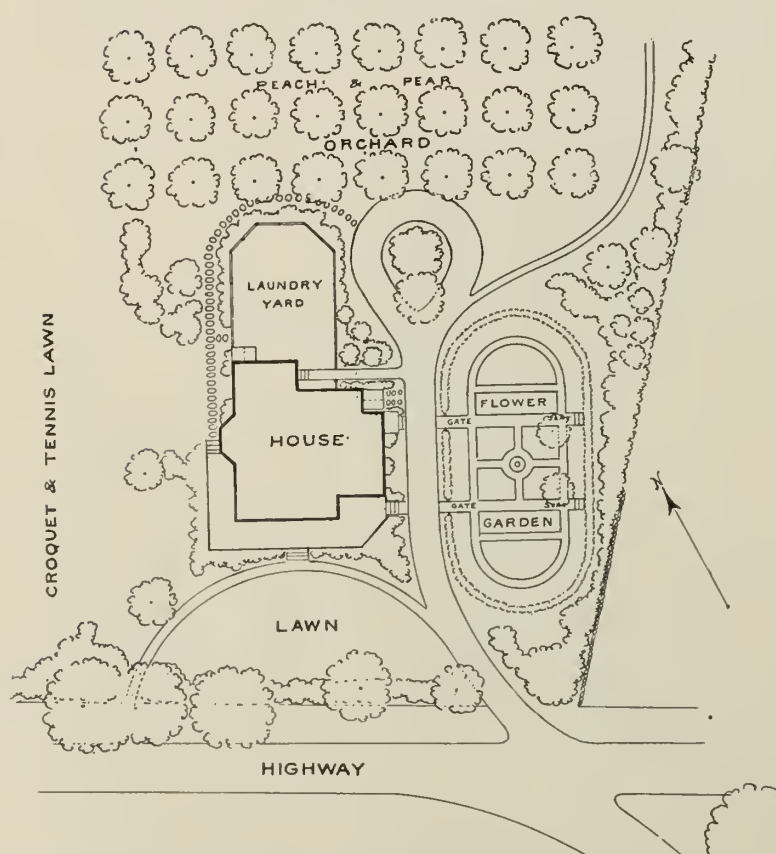
A love of flowers causes them to be set out in the most outlandish places and in the queerest shaped beds.

There is as much need for a design for the grounds as there is a design for a house, and in many instances more artistic taste is required to develop the existing features of the land than to devise the house. By such taste only, however, can the happy arrangements so often admired be attained.

The accompanying sketches show a small estate which is typical of the average treatment. In the first illustration, every available spot is occupied with individual plants, and the utilities of the home, such as the approach drive, the service drive, clothesyard and walk, utterly disregarded except as a means of ingress and egress



DISORDERLY GROUNDS

THE SAME GROUNDS REARRANGED
(See Illustration above)

and serving primary uses. In the second illustration, the drive is rearranged so that by building a flight of steps both the front and service portions of the house are served. Instead of scattered flowerbeds an enclosed area is made, in which herbaceous perennials and annuals may be grown to the heart's content. Instead of scattered beds of peonies and phlox, these flowers can be arranged alternately in the outer border of the flower garden so as to give nearly a continual show of flowers. In front of the peonies and phlox low-growing varieties of perennials may be grown, with here and there some annuals scattered, which add to the color in August and September when so few of the trees and shrubs are in bloom.

True practitioners of medicine try to find the fundamental cause of the disorder rather than treat the local condition, knowing that to improve the whole improves the local trouble. Such is the case in a small estate. The whole must be treated as to arrangement of grounds, depth of top soil, subsoil, drainage, fertilization, and then the embellishing features of trees and shrubbery.

It is an art to develop even the smallest property in order to produce the best results. A well arranged approach is the first introduction the visitor has to the estate. In many cases money has been lavishly expended upon the house while the grounds have been neglected. The house may be ever so good, yet its value is enhanced by its surroundings as a diamond is in its setting.

How much do such improvements cost? Each estate will vary with the local conditions, as to prices of top soil, fertilizer, labor and the amount of disorder that must be corrected. Often labor and money is wasted by not adopting a carefully thought-out design and adhering thereto.

Such a plan can be made that, as funds permit, work can be done in carrying it out satisfactorily, gradually working toward a final and complete whole, should it not be desired to realize the entire scheme in a single year.

THE INDOORS AND OUT SERIES OF MODERATE-COST DWELLINGS

Especially designed by Skillful Architects for Readers of this Magazine

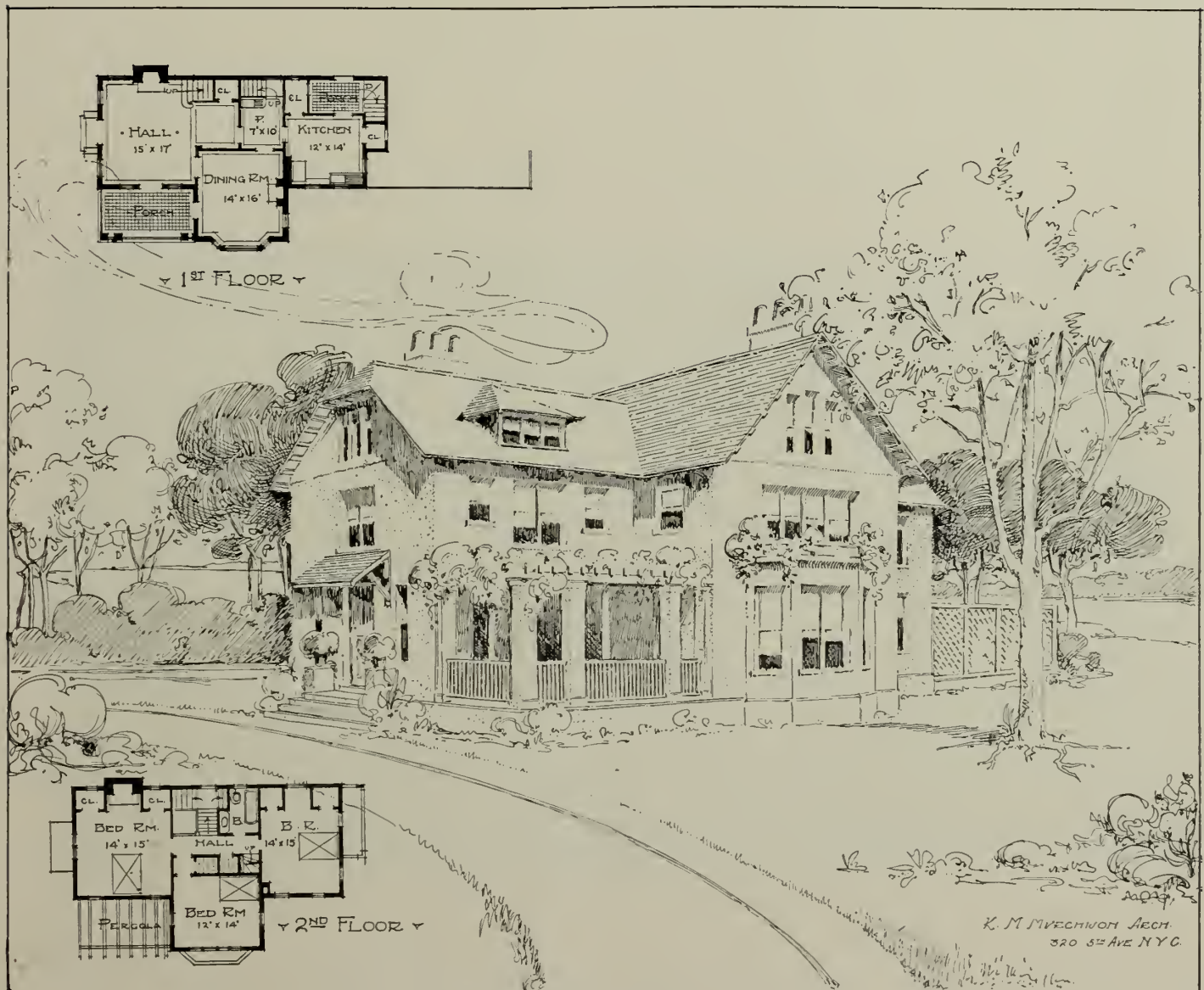
Number Three—A Small House to be built of Concrete

DESIGNED BY KENNETH M. MURCHISON

THIS fireproof cottage might be easily adapted to any suburban village, but is primarily designed to be placed by the seashore or in the open country. The rooms are few, but of ample size, while every room is exposed on three sides, insuring a great amount of coolness and ventilation.

The first-floor plan shows a living hall with the stairs rising very prettily in the back, the space under them being employed as a coat-closet. The back stair in the pantry communicates with the main stair at a point half way up to the second floor.

The kitchen has a refrigerator closet with



PERSPECTIVE VIEW AND PLANS

high-up door for admitting ice directly from outside. It also contains a pot and pan closet. All service to the dining-room is through the pantry.

In the basement would be placed the laundry, storeroom and furnace room.

The second floor consists of three corner bedrooms, each having considerable closet room, while above, on the third floor, would be two servants' bedrooms and servants' bath.

The construction of the house would be of reinforced concrete, though concrete or terra-cotta blocks plastered over could be substituted, if crushed stone and sand were not easily procurable. The walls would be eight inches thick of concrete backed by two-inch terra-cotta blocks to prevent the moisture seeping through. The exterior would have a coat of Lafarge cement floated on with a sand float, thus giving an attractive gray color. The shingles on the roof should be stained a moss green, while the shutters, pergola and other woodwork could be painted an

emerald green. The porch would be paved with bricks.

All interior plaster would be sand finish, the woodwork on the first floor being of chestnut stained nut brown, while the bedrooms would be finished in white.

The following schedule of cost will be found ample, provided the house is not too many miles from the railroad station.

The proximity of a stone-crushing plant or gravel bed for the concrete work will also enter, to a certain extent into the question of cost :

Excavation	\$210
Concrete work	2800
Terra-cotta and mason work	240
Carpenter work, including roof	1030
Plastering	300
Painting	175
Plumbing	425
Heating (hot air)	210
Electric wiring	100
Builder's profit	500
Total,	\$5,990

A Bathing Pool on a Private Estate



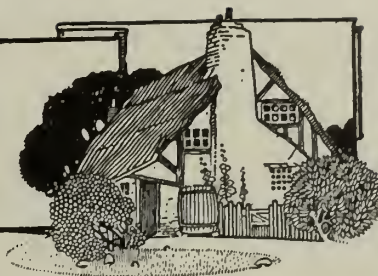
GENERAL VIEW OF THE BATHING POOL

(A Detail of the Central Feature will be found on the Front Cover of this Issue of "Indoors and Out")

THE joy of bathing and swimming on private grounds is difficult of indulgence if the estate is situated inland where clear streams or ponds are not to be found. Such bodies of water are rare in Southeastern Pennsylvania, and even more rare are the attempts to make up for the lack of

them. The outdoor swimming pool on Mrs. John S. Clarke's estate at Bryn Mawr, is not only unique in this respect, but it is a highly ornamental and altogether enjoyable feature of the grounds. The illustration shows it to be of cement with brick ornament. It was designed by Henry L. Reinhold, architect.

The Home Grounds



BEDDING WITH EVERGREENS.— The conventional place for a collection of small evergreens is in the carriage turn in front of the house, or by the entrance gate, or they may be dotted singly along one side of the lawn. But they will often do better, and will certainly look better, in a well-arranged group near more natural objects than gates and houses.

Evergreens always look well against rocks, and a group of them at the foot of a boulder serves as a connecting and transitional mass between the boulder and the lawn, and also gives, by contrast, enhanced value to the colors of the stone and the evergreens.

If there is an outcropping of ledge rock on the place, it can be surrounded or flanked and its outline softened and its apparent height increased or decreased by the skillful use of small evergreens. Spots in the lawn where the grass burns every summer, because of the presence of rock near the surface, can be planted and covered with low junipers, even if there is only four or five inches of soil.

THE JUNIPERS are the best shrubs to use in very dry places, and *Juniperus Virginiana* and *J. communis* will grow in almost any crevice of a rock, where there seems no soil at all and very little moisture. Their growth is slow under such conditions, but their color and health appear undiminished.

All the junipers are easy to grow and will stand much hardship in the way of shallow soil and drying winds and hot sun. Among the best in addition to the two mentioned above are *J. communis* var. *Canadensis*, which is the flat, almost saucer-like, shrub so familiar in New England; *J. Chinensis* var. *procumbens* which is low (less than one foot high) and spreading; *J. sabina* var. *procumbens*, similar in character to the last, *J. com-*

munis var. *suecica* which forms a striking columnar shrub.

The junipers are exceptionally good, because their blue berries are pleasant to see and attract the birds when the ground is covered with snow; and in winter their leaves change in color to reddish brown or coppery tones that seem more in keeping with brown grass and bare trees than the blatant blues of some spruces.

OTHER LOW EVERGREEN SHRUBS which will stand some dryness, though not as much as the junipers, are the Mugho Pine, the Swiss Stone Pine and various dwarf spruces.

On my own place I extend the "pinetum" beyond the limits of dry soil, and plant many other conifers, including the yews (except the American Yew that grows well only in moist ground under partial shade), which have strange but beautiful scarlet berries that are pleasant to eat.

Of the *Retinosporas*, I like best the light green *Chamaecyparis pisifera*; *C. squarrosa*, bluish and feathery; *C. filifera*, with thin branches; and *C. obtusa*, dark and dense.

Almost any young conifer is good for a few seasons, but some of the varieties grow so fast that I have to rearrange them every year; and every year there are many which outgrow their fellows and must be planted in permanent positions. They are fascinating things to play with, and are the most plastic material that one can find growing. In a day the whole effect of the plantation can be completely changed by moving a hundred or two plants about. This shifting can be done at any time when the ground is not frozen, without the slightest check to their growth, but it is usually done in the autumn, for then the season's growth is over and the size of the plant does not change till the next year.

C. D. L.



From Our Office Window

A SCULPTOR'S CONCLUDING WORK.

The misfortune which the death of Augustus St. Gaudens casts upon the country is lightened by a gratifying thought. The work he left undone is so nearly finished that it will emerge from the Cornish studio stamped by the touch of the great artist. Boston is to be honored by his statue of Phillips Brooks, and by the allegorical figures to go upon the pedestals in front of the Public Library. The latter commission was given to Mr. St. Gaudens twelve years ago, and it is said that an insurance policy was then taken out upon his life. The McGee Medallion, to be placed opposite the Carnegie Institute in Pittsburg; the caryatides for the All-bright Gallery in Buffalo; the Lincoln Statue for Chicago, and the Mark Hanna Statue for Cleveland's Park System are other works, which will be to the several cities a parting heritage of the sculptor to the country of his adoption. Of all his work, however, that which will be enjoyed the widest is the new United States coins, the relief on which is now being reduced. It is a selfish thought, perhaps, to look for more from his useful and brilliant career, but these later things will never lessen the glory of Mr. St. Gaudens' earlier work; and now that the brain and the eye and hand that produced them are stilled, all the more shall be cherished such beautiful objects as the Farragut and Sherman statues, the Puritan and the Minuteman.

GRAFT IN THE HOME

is being felt by wealthy New Yorkers who maintain residences, the monthly bills of which run to \$10,000.00 and more. "Commissions is the cry," says a correspondent of the Philadelphia "Ledger," and "my lady's maid expects her percentage for favoring the hairdresser, the butler demands his understanding with florist and wine merchant, the chef favors the supplies of those who favor him, the grooms know something about harness

dealers, and the chauffeur is friendly in a quiet way with repair shop and automobile accessories firms. The more that is used up the larger the bills, and the larger the bills the greater the commissions." How can it be otherwise when such large accounts pass the approving nod of servants who, though skilled at their particular handicraft, are often morally unreliable. The favoring those who favor them is rife among the servants of country estates. It is not surprising that in the dense city, where there are more frequent means of communication, the temptation to do so should be greater. The millionaire must have a new assistant to oversee the doings of his other servants. A bursar, or estate actuary, such an assistant might be called. He or she must have a natural aptitude for domestic detail, a knowledge of business methods, a perception of human nature, and must be conscientious above all things.

CHICAGO ARTISTS UNITE

The Attic Club, formed in Chicago by advanced spirits among architects, painters, sculptors, musicians and writers, is destined to fill a place in the social life of the city, that has been conspicuously vacant to the visitor, if not to the native. Those who follow the arts in Chicago have lived in comparative isolation. Their lack of solidarity and a meeting-place where their community of interests can find expression, not to mention the sympathy and good fellowship communicated by daily intercourse, accounts to some extent for the materialistic prestige of the city. This banding together of those devoted to the finer things of life, cannot but be productive of infinite good. The new club is not ambitious in its program as yet, and in that displays its wisdom. It occupies at present modest quarters under the roof of a skyscraper, where "We'll just take pot-luck together," as Lorado Taft puts it; but the intellectual and artistic spirits in the club insure its useful future.

INDOORS AND OUT

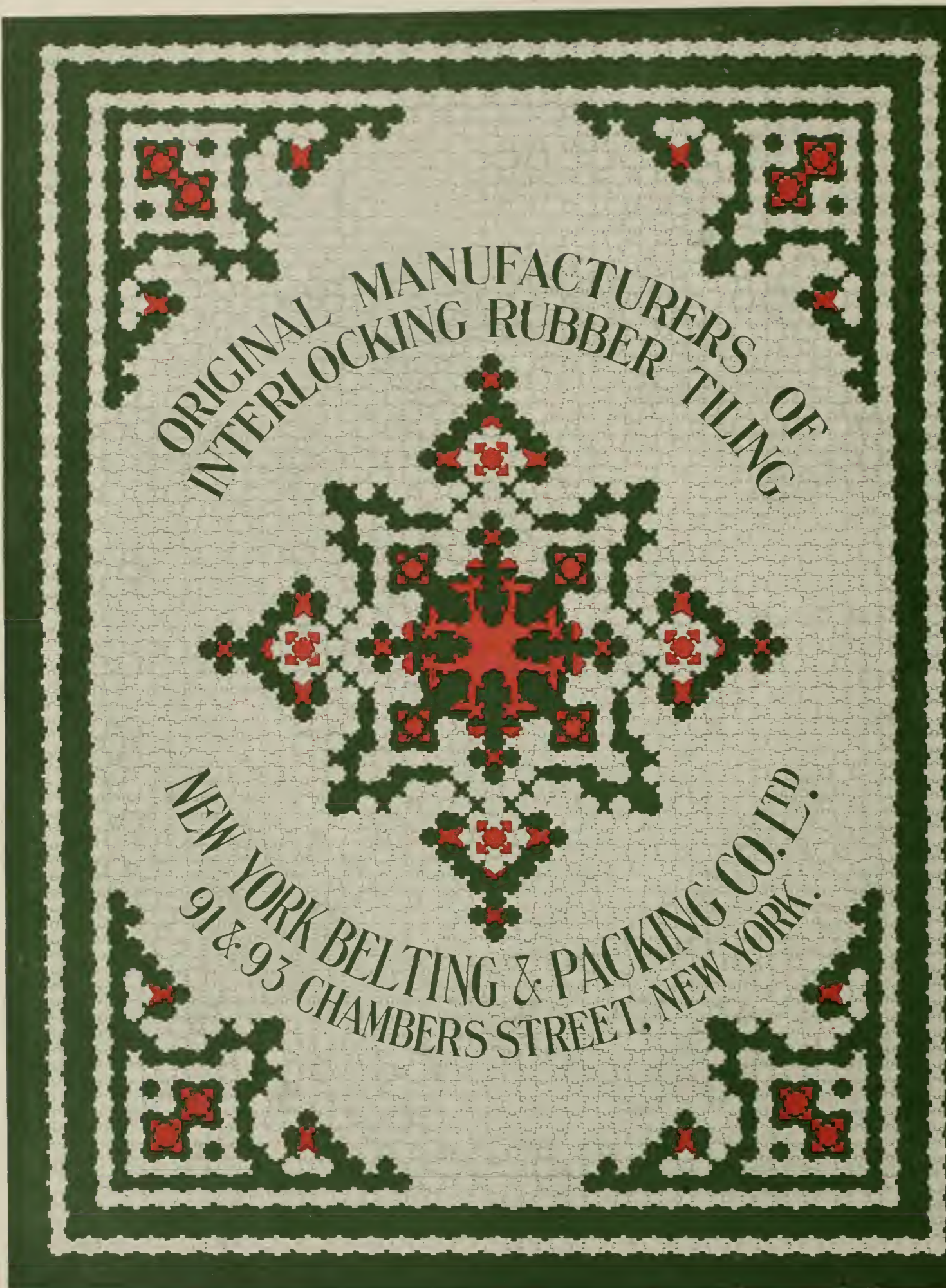
THE
HOMEBUILDERS
MAGAZINE

Rec'd
OCT 11 1907

OCTOBER



ROGERS AND WISE CO.-PUBLISHERS
NEW YORK BOSTON CHICAGO



ORIGINAL MANUFACTURERS OF
INTERLOCKING RUBBER TILING



NEW YORK BELTING & PACKING CO. LTD.
91 & 93 CHAMBERS STREET, NEW YORK.

Indoors and Out

THE HOMEBUILDERS' MAGAZINE

ROGERS AND WISE COMPANY

PUBLISHERS 85 WATER STREET BOSTON

NEW YORK OFFICE, 4007 METROPOLITAN BLDG., 1 MADISON AVE.

Copyright, 1905, Rogers and Wise Co.

Entered at the Boston, Mass., Post Office as Second-Class

Mail Matter, October 14, 1905.

SUBSCRIPTION PRICE, \$3.00 A YEAR IN ADVANCE. FOREIGN SUBSCRIPTION, \$4.00
TO CANADA, \$3.50 A YEAR SINGLE COPIES, 25 CENTS

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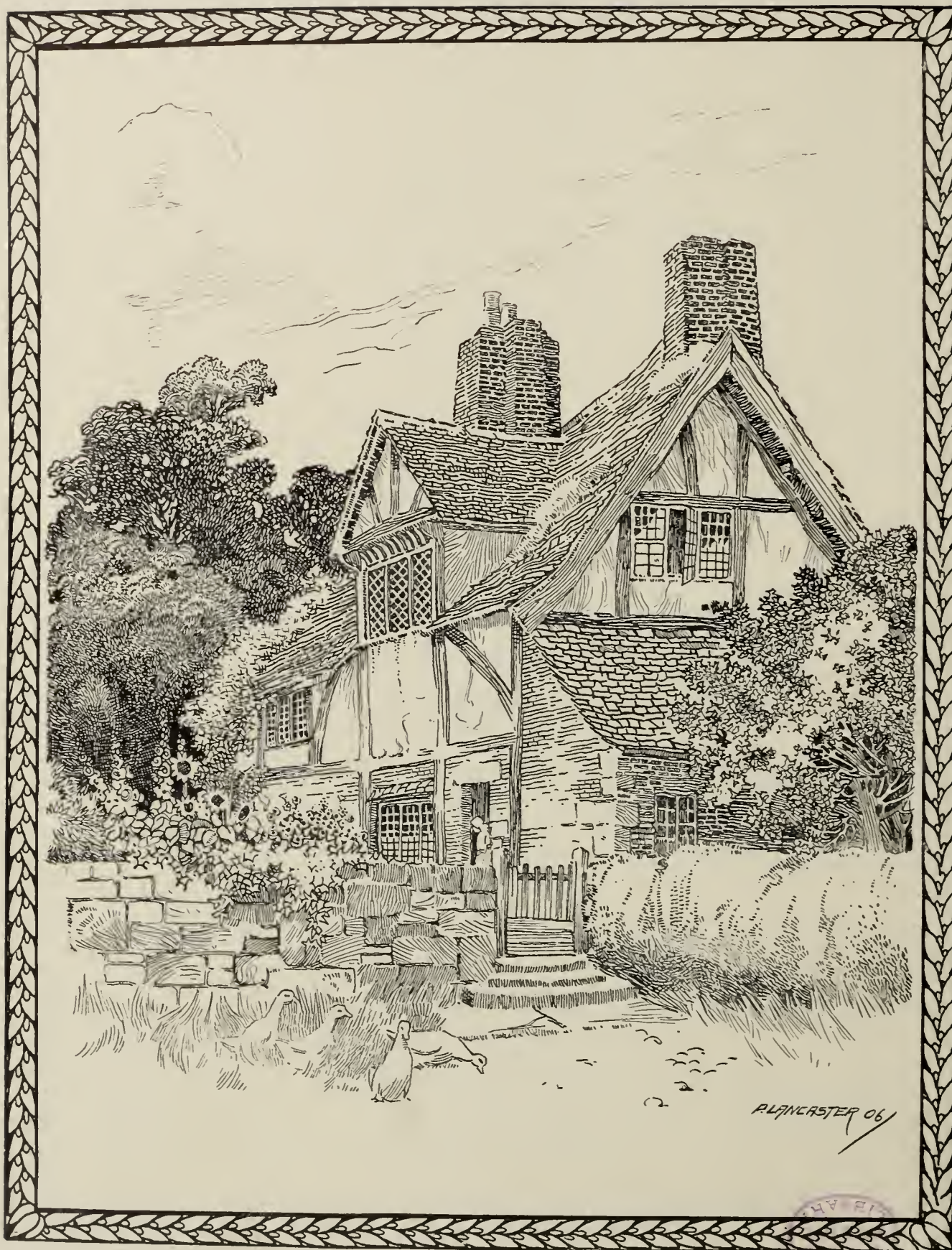
Contents for October

VOL. V

1907

No. 1

A ROADSIDE COTTAGE AT THE VILLAGE END	Frontispiece
LIBRARIES OLD AND NEW By John A. Gade	1
	(Illustrated)
HUNTING A TOWN APARTMENT By Florence Finch Kelly	13
THE DISPLAY OF TABLE CHINAWARE By Bertha M. Howland	15
	(Illustrated)
FLOOR COVERINGS FOR THE WINTER HOUSE By Page Dunbar	24
UPSTAIRS, DOWNSTAIRS, IN LIVING-ROOM AND CHAMBER	
	By Christine Terhune Herrick 26
	(Illustrated)
THE INDOORS AND OUT SERIES OF MODERATE COST DWELLINGS.	
IV. A House for a Servantless Family	
	By Wetherill P. Trout, Architect 33
	(Illustrated)
THE WINTER HILL GARDENING CONTEST E. M. W.	36
	(Illustrated)
WHAT TO DO WITH THE WALLS By George Haywood	38
A HOUSE FOR A NARROW LOT	39
	(Illustrated)
CELEBRATED FORMAL GARDENS OF AMERICA. II.	42
	(Illustrated)
REGULATION OF HEAT INDOORS By David H. Cuyler	44
BEAUTY INDOORS	46
	(Illustrated)
FROM OUR OFFICE WINDOW	48



A ROADSIDE COTTAGE AT THE VILLAGE END

Indoors and Out

THE HOMEBUILDERS' MAGAZINE

VOL. V

OCTOBER, 1907

NO. 1

Libraries Old and New

THEIR POSITION IN THE MODERN RESIDENCE, TOGETHER WITH AXIOMS OF THEIR
DESIGN AND EQUIPMENT

BY JOHN A. GADE

"That place that doth contain my books,
My books, the best companions, is to me,
A glorious court where hourly I converse
With the old sages and philosophers;
And sometimes, for variety, I confer
With kings and emperors, and weigh their councils."

—*Beaumont and Fletcher.*

THE Library — of all portions of the house the most intimate, the most personal and the most sacred, an unassailable fortress, a kingdom of one's own! The hearth of the library should, like the high altar of the church, be the sacred center of the home, to be profaned by no rash intruder. Here we touch on what should be the very keynote of a library's treatment — quiet and seclusion. Not that frowning austerity in decorations or proportions is to be aimed at, but a schoolroom is not meant for opéra bouffe, nor a library for frivolity.

In a curious old manuscript presented to My Lord the President Dumesnil by one, Gabriel Naudeus of London, in the year 1661, Gabriel attempts to define this very necessity of seclusion. "As to what then concerns the situation," he says, "where one would choose a place for the library, it seems that one should take it in a part of the house the most retired from the noise and the disturbance, not only of those without, but also of the family and domesticks, distant from the streets, from the kitchen, the common hall, and like place; to situate it (if possible) within some spacious court or small garden, where it may enjoy a free light, a good and agreeable prospect; the air pure, not near marshes, sinks or dung-hills, and the whole disposition of its edifice so well conducted and ordered, that it participate of no kind of indecorum of apparent incommodity."

A century earlier we find Montaigne insisting

upon something very similar, namely, "having his library remote from the interruption of servant, wife or children."

There is considerable wisdom to be gleaned from the old English injunction. Pass all the rooms of the house in review. Is there a single one that so distinctly and entirely belongs to the house-owner himself as his library? In the dining-room he is either entertaining guests or correcting children's manners; in the hall, hunting rubbers or drafts; in the parlor, exercising patience in outlasting visitors; — in the library alone the hours steal pleasantly by, recompensing for the toil of the day. Coziness, warmth and seclusion should here be aimed at. The room should be dignified without being ceremonious; sedate, without stiffness. With this aim in view, light colors are difficult to handle. Light green, for instance, or pearl grays or whites do not easily give the warmth of tone so necessary to the ideal of a cozy library.

Roughly speaking, libraries may be divided into formal and informal ones. By the former I mean the large class of excellent designs executed in France during the seventeenth and eighteenth centuries; informal ones are seen in the book-rooms of the English Elizabethan and Georgian country houses, more ordinary prototypes for the usual American country gentleman's residence. In both cases these are private libraries in the narrower sense, not separate buildings, but one room in a large house.

Regularity and orderliness are most noticeable in the French design. The architecture, the cases and the frames have primarily been considered; second, the books as mere fittings for the excellent outer shell. The dado and wainscot lines are evenly carried around the room, the



THE LIBRARY AT THE PALACE OF FONTAINEBLEAU

The *Ancienne Galerie de Diane* constructed by Henri IV, restored by Napoleon I and Louis XVIII. Decorated with paintings by Blondel and A. de Pujol. — 88 yards in length. Contains 30,000 volumes



THE LIBRARY AT THE CHÂTEAU DE CHANTILLY

Located in the old portion of the building, erected 1560, the design attributed to Jean Bullant. The windows open upon the *Cour du Châtelet*. The library contains about 13,000 volumes and interesting manuscripts.

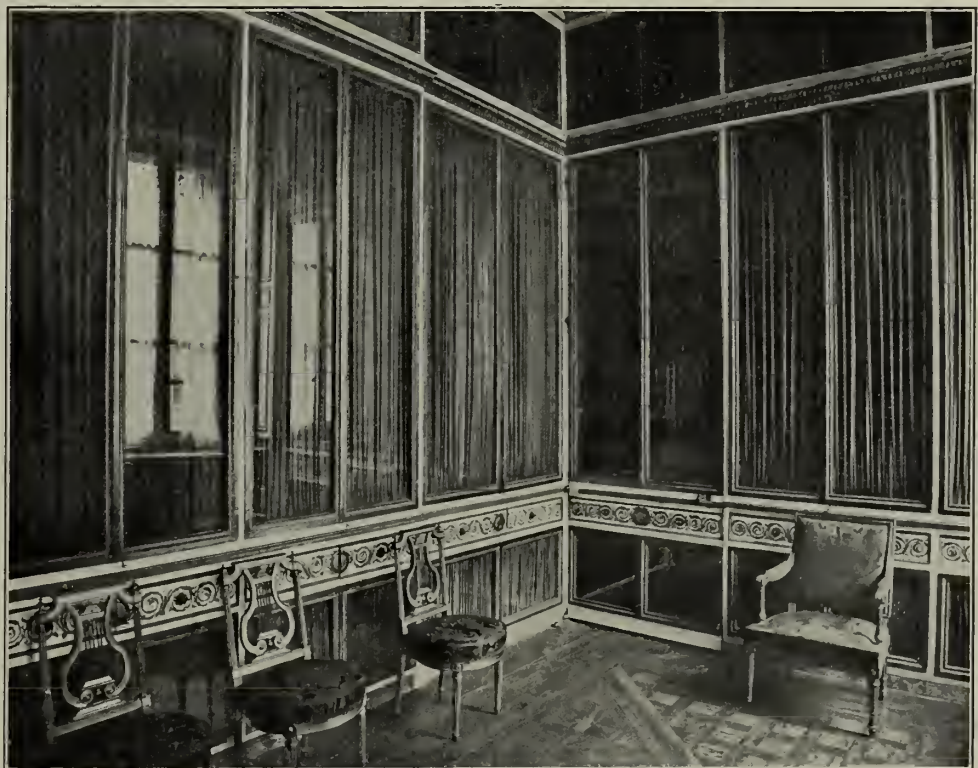
panel backs of the windows and lower panels of wall wainscoting and doors becoming panels of corresponding height, width and size to the lower portions of the bookcases themselves. The necessary projections of the shelves to receive the books are almost invariably hidden by the cornice of the room being brought forward to the front line of the shelves, thus making the bookcase doors flush with the adjacent wall surface and giving the cases the happy appearance of being built back into the walls instead of encroaching upon the floor space of the room. Mantel design, overmantel, ornamental bands, horizontal string courses and entire decorative treatment are made one continuous, harmonious design, admirable in its simplicity and regularity. The books, like swallows perched along a telegraph wire, sit unchallenged on their shelves. You would hesitate to remove them from their cabinets. The surrounding chairs do not invite lounging nor self-forgetfulness. The whole effect is one of excellent, simple, straightforward design.

A very different picture meets us in the old engraving of "The Bookworm." High up on his stepladder, with spectacles pushed eagerly back on his forehead, his nose buried deep in a book he holds with one arm, the other hugging another volume, with which he means shortly to descend. Books run up and down everywhere, from floor to ceiling; small shelves, big shelves, deep and shallow shelves; octavo, folio, duo-decimo and quarto; books in boards, in cloth, vellum, sheepskin, bock, pigskin, calf and Russia, in morocco and in levant — books in endless regiments and profusion. Instead of a show room, the library has become a working room, or, if you will, the Student's Playroom, where there is

"The love of learning, the sequestered nooks
And all the sweet serenity of books."

You should feel that you can, as the Latin proverb says, "with the best part of learning, know where to find things." You may curl up in a comfortable, high-backed, concealing chair and gobble a book as serenely as Dr. Johnson used to gobble his dinner.

There should be no wall paper if avoidable, for it is only distracting and out of place. There is no wall paper so good as the backs of the books, themselves. No more glorious shades of dusty golden, ivory glory were ever spread before the enchanted eye than the parchment backs on the Vatican shelves. If there is not a sufficient num-



LIBRARY IN THE SMALLER APARTMENTS OF MARIE ANTOINETTE AT VERSAILLES

ber of books to run to the ceiling, fill out the walls with warm brown chestnut or walnut or cypress or oak panels. They will enclose and warm it, even during the dreariest snowstorm without. If as expensive a material as wood cannot be employed for the covering of the walls, use a non-committal burlap, drab or gray or brown, of one uniform tone, with perhaps merely a texture or weave or surfacing to it, just to keep it from looking licked and bodiless. You may use a dish-rag colored canvas, or a soft matting, and rub it with the color of tobacco juice, or a buckram or book cloth, and fill it with golden sunlight.

The bookcases are a difficult question. I



READING-ROOM IN THE LIBRARY OF THE ARSENAL, PARIS

The *Bibliothèque de l' Arsenal* is the second richest library in Paris and contains 454,000 volumes and 9,654 manuscripts



A PORTION OF THE BODLEIAN LIBRARY AT OXFORD

Established in 1445, rebuilt by Sir Thomas Bodley in 1597-1602. Contains 500,000 printed volumes, 30,000 volumes of manuscripts and drawings, 50,000 coins and a collection of models, autographs, antiques, etc.

OXFORD
PUBLIC
LIBRARY

should, as I have previously urged, run them if possible directly to the ceiling. If the owner has not a sufficient quantity of books to make this feasible, he may run them one-third or two-thirds up the sides of the room. A half-way subdivision, say cases five feet six inches high in an eleven-foot room, is never pleasing. You feel the walls have been sawed in two. Whether they be low or high, do not make the lower part of the room a library and the upper a picture or chromo gallery, and above all, avoid the knick-knack collection on the upper shelves of your cases. The draping with antimacassars of Japanese kimono, pottery and majolica vases, porcelains and kodaks and plaster casts does not add to the "homelike" appearance of the room. The origin of this most "banal" of customs must, I believe, date back into the early portion of the last century, for an architect then gives this dangerous advice:

"Finally, it would be great forgetfulness if after we have thus furnished a library with all books requisite, it should not have the shelves garnish'd with some slight searge, buckram or canvas, fitted on with nails, silvered or gilt, as well as to preserve the books from dust as to render a hansom ornament and grace to the whole place; and also, should it be provided of tables, carpets, seats, brushes, balls of jasper, conserves, clocks, pens, paper, ink, penneknives, sand almanacks, and other small movables, and such like instruments, which are of so little cost, and yet so necessary that there is no excuse for such as neglect to make this provision." Verily, in our day, there seems little excuse for filling the library to overflowing with miserable photographic and plaster copies of immortal works of art. "In my library," says Sir William Waller, "I am sure to converse with none but wise men, but abroad it is impossible for me to avoid the society of fools," — even worse intruders are the objects from the pushcarts of the Italian street vender and the lens of the amateur kodak fiend.

But to go back to the shelves, their width, depth and length are all of importance. They

should of course always be placed on movable (preferably countersunk) strong metal pegs, in order that their distance apart may at any time be varied according to the wishes and necessities of the librarian. The weight they are obliged to carry is considerable, and so often underestimated that the shelves may frequently be seen bent down in the middle under the weight of the books. The shelves should be made of a strong material, in hard wood; oak may be employed, one or one and a quarter inches thick and not over three feet long. Shelves as well as their cases are almost always made deeper than necessary. The effect is bad when some books project beyond the others. Eight inches in the clear,



INTERIOR OF AN OLD GERMAN LIBRARY
Distinguished by its Simplicity of Arrangement

instead of ten and twelve, as is generally the case, will suffice for almost all books. Inches in floor space are very precious and should be jealously conceded. The unusual cases of deep folios may be provided for by making the two lower shelves of the cases deeper than those above, the top of the projecting base-shelves thus forming a ledge, convenient either for the resting of books temporarily taken from their places or as a step by which to reach the upper rows. In the great English university libraries, in the Bodleian at Oxford, in Merton College Library, etc., the utility of this lower projecting shelf is at once recognized.

As a rule, in calculating the requisite space of



THE LIBRARY OF THE ATHENÆUM IN PHILADELPHIA
The Work of the Early American Architect, John Notman

running feet required for the housing of a library, eight to ten volumes to the running foot should be adequate. The provision for expansion and growth should naturally be considered in all libraries, if one is not to be driven to such expedients as De Quincy, who finally kept his choicest volumes in the family washtub. Large private libraries range from three thousand to six thousand volumes, rarely exceeding the latter number. Roughly speaking, a thousand volumes require from eighty to one hundred square feet of floor measurement.

You should be able to take from its shelf without too much exertion any book in your library. If your room is high and your books run up above seven feet, a second level for reaching the upper rows will be requisite. This is best formed by a small iron balcony, naturally designed as compact and inconspicuous as possible, for, as it can never be ornamental and at best is somewhat unsightly, it should only be resorted to in case of necessity. It is always better to increase the floor space rather than the height. Enter your gallery if you must have one, by the method most economical in floor space, the spiral staircase, and place this in the least noticeable corner of the room, concealing it as far as possible. The staircase and

gallery should be of iron to have the smallest possible sections. A very frequent device in the architectural treatment of a bookcase scheme is to use one of the classical orders, the pilasters forming the horizontal sub-divisions between adjacent cases, and the entablature, the platform and construction for the superimposed balcony. Where the books of upper shelves are seldom handled, a plain ladder or even ladders on a system of rails and trolleys become a simpler device for reaching high volumes. Those in the Bibliothèque Nationale of Paris are as well designed as any.

Nearest the floor I should invariably recommend a row of drawers or cupboards, first, to exclude dust from the books, in case the shelves are unenclosed by doors, and, secondly, to provide convenient space for manuscripts, unbound magazines, papers and the many collections of a library unsuited for the shelves. The French always recognize the value of the lower cupboards, making their cases "*a deux corps*" with the lower enclosed panels for prints and papers.

Above the lower row or rows of cupboards or drawers comes the question whether or not to enclose the books with doors. The glass doors are a considerable item, if expense is to be avoided; but even if this may be disregarded, there is something to be said on both sides. Books undoubtedly look better standing free, as they give a feeling of greater intimacy when unobstructed by chilling frames. Andrew Lang, in his admirable book on the library, suggests "open oak cases for modern authors and for books with common modern papers and bindings, and the closed *armoire* for books of rarity and price. This the librarian will find the most useful mode of arranging his treasures." Glass doors may, as, for instance, in Louis XVth's library at Versailles, make nothing better than precious museum specimens of the



QUEEN'S COLLEGE LIBRARY, OXFORD

Situated within the group of buildings founded by Robert de Eglesfield, confessor of Philippa, consort of Edward III, and named by him in honor of His Royal Mistress. The largest collegiate library at Oxford



THE LIBRARY OF TRINITY COLLEGE, CAMBRIDGE

40x190 feet. Built by Sir Christopher Wren in 1676. The fronts of the bookcases carved by Grinling Gibbons. Contains 100,000 printed books and 2,000 volumes of manuscripts



THE LIBRARY AT ETON
Contains Oriental manuscripts and rare old English volumes



THE LIBRARY OF HATFIELD HOUSE
59 feet wide, 27½ feet long and 21 feet high, in the stately Jacobean mansion, the residence of the Marquis of Salisbury. The collection includes rare historical manuscripts. Valuable portraits decorate the room.

volumes behind them, which one feels a moral hesitation in handling. The books might almost as well be guarded back of padlocked screening or chained securely each to its desk or chest, as in ancient libraries when their value and scarcity were extreme. In such a library as that of Versailles the owner could but seldom "have fed on the dainties that are bred in a book," whereas one should be "*en famille*" with one's books. Behind doors much of the beauty of coloring in the backs is lost, and it is with certain books as with some men and women, that they are most known and perhaps only admired for their outward adornment. On the other hand, doors are very necessary for the best preservation of books. The true book-lover will not desire the glazed work carried out in wooden mutined panes of diamond patterns or elaborate design, nor of leaded glass work of Gothic lines. I have seen golden tulips encased by lead rising from a sluggish stream of stained glass forming the glass panels of bookcase doors. Herodotus and Euripedes were hiding their backs in shame behind it. The glass should rather be of the clearest plate glass, nor could the shelves be of a better material. The beauty of such shelving may be seen in Scribner's Fifth Avenue bookstore.

You cannot take too good care of your books, and books have enemies which may best be fought by the use of doors. First of all comes the dust, especially from the carpet. Whether doors are employed or not, the books and shelves should be dusted regularly. Can you not appreciate Boswell's delight when he found Dr. Johnson with gloves on his hands beating the dust out of his library?

Dampness is another enemy of books. Paper and bindings may become mildewed, leather may rot, the backs become unglued and lose their flexibility. A greater precaution than the use of doors is not to place your library on the ground

floor of your house, especially in a low-setting country house. Heat may also be greatly counteracted, and the bleaching and fading of the backs of the books, by the interposition of glass. The red moroccos, dyed with cochineal, are practically the only backs that will hold their color when exposed directly to the rays of the sun, and these only for a short while. Heat is dangerous, and the architect or owner should take the greatest care with its introduction and arrangement. Never allow a register or radiator to come directly under the books. Place the hot air supply as far as possible from the books, preferably under the windows. Remember that the covers of your books nearest the ceiling are slowly warping and the glue of their backs giving way, even though the heat near the floor may not be very great. Seventy degrees Fahrenheit is a safe maximum temperature. Ventilate the library constantly, if possible by direct communication with the outer air.

Dust, dampness, sunlight and heat may all be counteracted by the furnishing of proper doors, — but fire, insects and vermin can not. Naturally the best method of counteracting fire is by building of fireproof materials. You can build your shelving and stacks entirely of iron and glass; as for vermin, bookworms, cockroaches, mice, croton bugs and other enemies of books,



A PRIVATE LIBRARY IN DETROIT



SKETCH FOR THE INTERIOR OF A LIBRARY
By Kilham & Hopkins, Architects

they may best be kept out by the only excuse for the ownership of a library, that of its frequent use.

If you have no books, you had better have no library, for its only *raison d'être* lies in its being the creation or outcome of its possessor's individual mind. The unused or misappropriated library recalls the Wiltshire clothier mentioned by Southey, "who gave his bookseller no

other instructions than the dimensions of the shelves," or the Liverpool merchant "who was fitting up a library, and had told his bibliopole to send him Shakespeare and Milton and Pope, and if any of those fellows published anything new, to let him have it immediately."

You may say you desire a library in your house, even though you do not care for it primarily for study, or even reading. Granting that a man enters a library with one of two purposes, either to find a certain book and read it, or to examine the collection as a whole, you may build and arrange your library to suit the one contingency or the other. Everyone has a cer-

tain right to build with reference to his own inclinations and purse. According to Lord Bacon, it should form the best portion of a princely palace, with imbowed windows and pretty retiring places for conferences, which keep off both wind and weather. This mental picture probably dates back to his early Cambridge days of study in long, narrow college libraries with deep-recessed windows and seats separated from one another, the bookcases forming two continuous rows of alcoves.

But in the ordinary house library, alcoves are seldom needed, shelving along the side walls giving all the requisite book space. If your collection of books is so great or the dimensions of your room are so awkward that subdivision is necessary, as happy a one as can be made is the division of the room into three compartments by a columnar treatment or a light screening, not sufficiently heavy to disturb the feeling of continuity or the unity of the three portions. The two end compartments



JUDGE ALTON B. PARKER'S LAW LIBRARY

will form practically right and left hand alcoves or small, continuous ante-rooms leading off the larger central chamber.

The lighting of a library is, of course, of immense importance, for there, of all rooms in the house, your eyes will be constantly and severely taxed. The light must be of the best and not too strong. The ideal library has no room above it, but is lighted by the direct diffused light of a skylight. This will light all portions of it, and equally well, books as well as the reading chair. The windows should receive the sun of the morning hours and the prevailing cool breezes of the locality. Remember that you may sacrifice too much light space to bookcases, just as easily as you may provide too few shelves.

I have condemned the use of knick-knacks as discordant decorations in a library. Let us limit this dictum. Busts or medallions of authors may be introduced in a dignified or harmonious manner.

"Selected shades shall claim thy studious hours,
There shall thy ranging mind be fed on flowers,
There, while the shaded lamp's mild lustre streams,
Read ancient books, or dream inspiring dreams;
And, when a sage's bust arrests thee there,
Pause, and his features with his thoughts compare:
Oh, most *that* art my grateful rapture calls,
Which breathes a soul into the silent walls."

The book, the "*liber*," whose etymology is preserved in the word library, was anciently the inner part of the tree (*liber*) on which men used to write. The French first used the word *librarios* for the monk, the copyist, and later applied it to the library itself; the encyclopedia gives the weak etymology of a library as "a room or suite of rooms originally attached to a collegiate or monastic establishment for the keeping of books." One derives a far better idea of its meaning from the inscription placed by Julian in the fourth century over the doors of his library: "*Alii quidem*



LIBRARY IN RESIDENCE OF CHARLES G. RICE, ESQ.

At Ipswich, Mass.

William G. Rantoul, Architect

equos amant, alii oves, alii feros, mihi vero a puerulo mirandum acquirendi et possendi libros insedit desiderium."

Libraries go back as far as the civilization of Babylon and Egypt, but the private library in the modern sense had not become a recognized feature in the private house before the seventeenth century in France. Since the beginning of the last century, circumstances, if not fashion, have completely altered the idea of the room. We no longer possess books and libraries as the Grand Condé did at Chantilly, or the Duchesse de Maine at Sceaux, or the Earl of Spencer, or Norfolk, because we are persons of fashion and of wealth. But we own libraries because book-buying has become a passion with us, we spend our last penny on a *rarissimus*, and we are prouder to come home laden from a forage at the *bouquiniste*, than with the fox tail hanging from our crop.

Gentlemen of to-day gather books under their roof because they truly are their companions, and the elaborate, sumptuously fitted libraries of our booklovers have become libraries in the truest sense of the word. Books on books are the main factor, and not, as in the library of the Cathedral of Sienna, the decorations. To compare the great libraries of modern Americans



LIBRARY IN RESIDENCE OF A. F. POPE, ESQ.

*At Farmington, Conn.**McKim, Mead & White, Architects*

with similar ones in the old world we must choose Abbotsford or Hawarden, which were built for study and delight. The decorations have become merely the background and the setting for the books. Libraries similar to Robert Hoe's or Brayton Ives' of New York, George Vanderbilt's of Biltmore, the late Clarence Clark's of Philadelphia, and the many other similar ones, have all been built as the workshops of their owners.

We find in our American libraries of the most finished types, similar to the ones I have mentioned, every appurtenance and convenience of modern library fitting and furnishing. Memoirs, biography, history, essays, poetry, science, fiction, the classics, every branch of literature, is allotted its own place. The old English writer gives excellent advice when he says "without order or disposition, be the collection of books whatever, were it of fifty thousand volumes, it would no more

merit the name of a library than an assembly of thirty thousand men, of an army, unless they be martialled in their several quarters, under the conduct of their chiefs and captains." Order and arrangement are such that the librarian can with ease lay his hand on whatever book he desires. The skillfully condensed card catalogues are fitted into drawers forming a portion of the cases. The book-rests and racks are similarly treated. The artificial lighting of the room has been carefully planned, plenty of electric base plugs

and table lights have been provided for reading lamps directly over the tables where the reader may sit. Provision has likewise been made for running lights out between the divisions of the cases in order to light these, if books are to be taken out.

The great Saxon scholar, Alcuin, who had spent his early life among the shelves of Archbishop Egbert's library at York, was moved to Tours when advanced in years. It is pathetic to read the epistle despairingly penned to Charlemagne, wherein he begs him to send into Britain to procure books, "that the Garden of Paradise may not be confined to York."

This is what a library should be, a Garden of Paradise, where youth may draw inspiration and old age, solace from those books which

"Are a substantial world, both pure and good,
Round which, with tendrils strong as flesh and blood
Our pastime and our happiness will grow."

*A House at Chestnut Hill, Philadelphia**Cope & Stewardson, Architects*

Hunting a Town Apartment

WHAT TO LOOK FOR AND HOW TO SYSTEMATICALLY PURSUE THE SEARCH

BY FLORENCE FINCH KELLY

THE home-coming family has before it no task more dreaded than that of hunting for an apartment. And there is ample reason. For the primary necessities of the ordinary being—space, privacy, light and sunshine—are exactly the things it is most difficult to find in apartment houses. The desire of apartment house owners to make the ground plot yield the maximum of rentable space has led to more and more division of floor space into apartments and, in order to keep the same number of rooms in each apartment, to the cutting down of the size of rooms, until the art of living in a city apartment has become a thing that calls for much inventive faculty, and is to be learned only by long practice.

But with all these disadvantages the apartment house has become a fixture of city life. Even in those cities where it is possible for residence sections to spread out indefinitely, and where ground values have not risen to high figures, apartment houses have made their appearance, and suites in them command as much rent as individual houses having yards and an equal number of rooms, but situated a little farther from desirable centers.

Perhaps some part of the reason is to be found in the innate tendency of the human being, the desire to feel himself constantly in close relations with his fellow beings. But there are certain practical features which make the apartment desirable even for those who would be quite willing to give up a goodly share of the close relationship. The compact form of the apartment, which lessens the amount of housework necessary to keep it in order and so makes it possible to dispense with some of the service needed in the separate house, makes a strong appeal to the house mistress. The janitor service, which takes care of the halls, stairways and sidewalks, and attends to the removal of all refuse, also lessens greatly the housekeeper's care and responsibility. The possibility of getting heat and hot water by simply turning a tap still more lessens the work of housekeeping, while it adds greatly to the comfort of life.

In all the affairs of life it is usually necessary, if we wish to gain some new good, to give up one which we already have, and so we have purchased these comforts of the apartment house at the cost of much that we once thought—and most of us do yet—very desirable in the conditions of daily life. We must grow accustomed to seeing and hearing constantly all about us the figures and speech of strangers and to remembering that our own voices and movements are as audible to them as theirs are to us. We must learn to bear, with as little irritation as possible, the thousand small annoyances of such a crowded life and to govern our tempers and our actions with the constant rule of "live and let live." And after giving up so large a share of our privacy, we must give up also a good deal of our light and sunshine. It all resolves itself into the question of what we are willing to lose in order to get something else. A good deal of the privacy that is exceedingly dear to most of us it is absolutely necessary to forego in the apartment house, but it is not always necessary to yield as much of air, light and sunshine as most people readily relinquish.

Top floor apartments offer advantages in all these matters that go far to make up for their disadvantages of increased stair climbing. In elevator houses apartments on the top floor are higher in price than those lower down. But in those without elevators the top floor and the ground floor are the cheapest. Given the elevator, the top floor, as is proved by its rental value, is the most desirable in the apartment house. If it is necessary to climb stairs, the question becomes how much muscular exertion one is willing to pay for its very considerable advantages. It is quieter, since there are no overhead sounds and the street noises are slightly less grating than they are on lower floors. Being farther removed from the street, there is better air and there is much less dust. In the summer the top floors are cooler than the lower ones because they get less of the heat radiation from the sidewalk, and in the winter they have more sunshine, since they

are less shadowed by surrounding structures. And, finally, on the top floor there is a little less of that turning inside out of one's daily existence that is the most annoying feature of apartment house life. Ground floors are very likely in winter to be the coldest in the house, as in summer they are sure to be the warmest, dustiest, stuffiest.

When it comes to matters of light and sunshine, the renting public has accepted too tamely the conditions imposed upon it by landlords. No housekeeper ought to be willing to allow her family to live for a day in the sort of apartment which hundreds of thousands have come to consider as a matter of course. City dwellers are apt to think themselves lucky if they get sunshine in one room or two rooms. The others may look upon courts more or less small; upon airshafts, in which there are always smells; or across narrow spaces upon damp walls, and it is all the same. In probably three-fourths of the apartments in all large cities it is necessary to have artificial light in the bedrooms and often in kitchen and dining-rooms, if one wishes to see plainly at any time of the day on any day of the year. The health-giving sunshine never strikes them. Such apartments are breeders of disease, thieves of vitality, blighters of eyesight and wreckers of nerves. In New York the hand of the law has come down upon the apartment house builder and compelled him to devote a larger proportion of his ground space to courts and openings for letting in the light and air. But there still exist, in all the large cities where the apartment house furnishes the usual mode of living, blocks upon blocks, miles of them, of apartment houses that are not fit for human habitation.

It should be the unalterable determination of every housewife who is starting out this fall to find an abode for her family to reject everything that does not have the full light of day in every room, with sunshine for at least a part of the day in most of the rooms, and in all of them, if possible. This should be the primary consideration and everything else should give way before it. It is more important than grade of locality or convenience of location for any or all the members of the family, and it is well worth any economy in other things that may be necessary in order to pay its possibly higher rental.

Much of the wearisomeness of apartment hunting can be obviated by going at it in a systematic way. The first necessity is to decide beforehand upon the outside limit of rent which one can pay. Rentals vary so much in different cities that it is not possible to consider that phase of the question with detail. But there is an economic rule which ought to be kept in mind by every house hunter, namely, that the rent should never exceed one-fifth of the income. That is, it should not exceed one-fifth of that portion of the income devoted to living expenses. And this should not include such fixed charges upon the income as the amounts set aside for savings bank deposits and payments upon insurance policies. If the house-hunter allows herself to be persuaded to exceed this proportion by her desire to secure some particularly pleasing apartment or by the smooth tongue of a real estate agent, she and her husband are pretty sure to find themselves in financial difficulties before the year is out.

Having decided beforehand upon the rental to be paid, the size of the apartment, and a choice of several locations, the next step is to visit one or two or more large renting agencies and secure lists of apartments in which all the desired features can be found. This is much more satisfactory than depending upon advertisements. For the advertisements can rarely be trusted in all respects, while close questioning can elicit from the real estate dealer every feature, whether desirable or otherwise. If one insists upon light and sunshine the list from each agency will be small enough, but the expenditure of time, strength and energy will be reduced to the minimum. The plan followed by some house-hunters of walking through the streets and making inquiry wherever they see the sign of "apartments for rent" is very similar, in comparison of effort with result, to the task of looking for a needle in a haystack.

When balancing the rental one is willing to pay against the various houses in which it is sufficient, it is necessary to keep in mind the several things one wants to secure. Elevator service, for instance, may be desirable, but the rentals in elevator apartments are invariably so much higher than the cost of the service would seem to warrant

(Concluded on page 23)

The Display of Table Chinaware

HOW TO ARRANGE OLD AND NEW CHINA TO ENHANCE ITS OWN BEAUTY
AND THAT OF THE DINING-ROOM

BY BERTHA M. HOWLAND

THE problem of the arrangement of china in one's dining-room is — if one set aside the merely utilitarian problem of the storage of household goods — largely one of making the most pleasing possible distribution of decorative spots of color on a wall surface.

Yet in planning this distribution, the question may be studied from two different standpoints — either from the decorator's standpoint of creating an attractive room and hence treating the china purely as a decorative scheme of color, or from the connoisseur's standpoint of giving one's first attention to the china itself, and by treating each piece as an individual work of art, so place it that it may receive the best possible setting, and, secondarily, be so arranged as to obtain for the whole room a decorative finish.

China that is truly beautiful pleads for close and almost caressing observation, and even handling, and must not be placed far out of the range of eye and hand, unless, perhaps, the color is treated in bold broad areas, as, for instance, in the large pieces of old Delft, or the wide, plain

bands of some Limoges. This feeling of genuine affection for the more detailed beauties of a bit of china found, perhaps, its best expression long ago in that quaint but very short essay of Charles Lamb's on "Old China." No one else has ever caught that feeling quite so sensitively.

He writes of "those little, lawless, azure-tinc-



FIG. 1. EFFECT OF A CONFUSED BACKGROUND
The Table Service is Hardly Distinguishable from the Strong Pattern of the Wall Paper



FIG. 2. EFFECT OF A FLAT-TONED BACKGROUND
The Plain Wall Enhancing the Effect of the Table Service

tured grotesques, that under the notion of men and women, float about, uncircumscribed by any element, in that world before perspective — a china teacup." He says, "I like to see my old friends, whom distance cannot diminish, figuring up in the air (so they appear to our optics), yet on terra firma still — for so we must interpret that speck of deeper blue which the decorous artist, to prevent absurdity, has made to spring up beneath their sandals. . . . Here is a young and courtly mandarin, handing tea to a lady from a salver — two miles off. See how distance seems to set off respect! And here the same lady, or another — for likeness is identity on teacups — is stepping into a little fairy boat moored on the hither side



FIG. 3. OLD-FASHIONED CORNER CUPBOARDS, OR BEAUFaits, IN THE ROOMS OF THE ANTIQUARIAN SOCIETY OF CONCORD, MASS.



FIG. 4. OLD COLONIAL BEAUFaits ADAPTED TO THE DINING-ROOM OF A MODERN HOUSE



FIG. 5. AN UNUSUALLY WELL-CONSIDERED EXAMPLE OF WALL SPACING
Showing a Delicately Adjusted Sense of Balance and Proportion



FIG. 6. AN EFFECTIVE "BUILT-IN" SIDEBOARD
Flanked by Straight-lined, Leaded-paned Cupboards



FIG. 7. A DINING-ROOM ORNAMENTED BY CHINA CUPBOARDS BESIDE THE CHIMNEY-PIECE

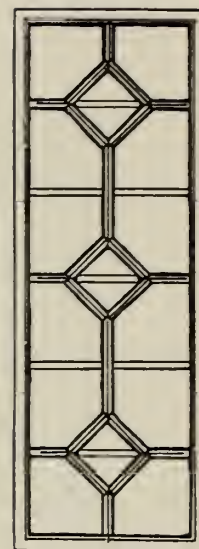


Fig. 8. Suggested Rearrangement of Door Muntins and Shelves of Fig. 7

the decorative effect of the room itself may be much enhanced at the

of this calm garden river, with a dainty mincing foot, which in a right angle of incidence (as angles go in our world) must infallibly land her in the midst of a flowery mead—a furlong off on the other side of the same strange stream! . . . So objects show seen through the lucid atmosphere of fine Cathay."

So is the same fine, sensitive and sensuous enjoyment to be stirred by the exquisitely sculptured garden urns and the sweep of the gondolas in the narrow water ways between the temples of a bit of old Longport, or the delicate traceries of roses and green butterflies on a plate of Rose Canton.

As in the case of the best oriental embroideries, all these finer details invite intimate and leisurely enjoyment, an enjoyment quite lost, when through the haze of distance these pieces are seen merely as spots of color in the far-off region of a frieze. It is undeniable, however, that

cost of this sacrifice, but one should deliberately choose wherein lies the greater enjoyment.

Another fundamental point to consider in the placing of china is its structural quality of brittleness, the limitations of

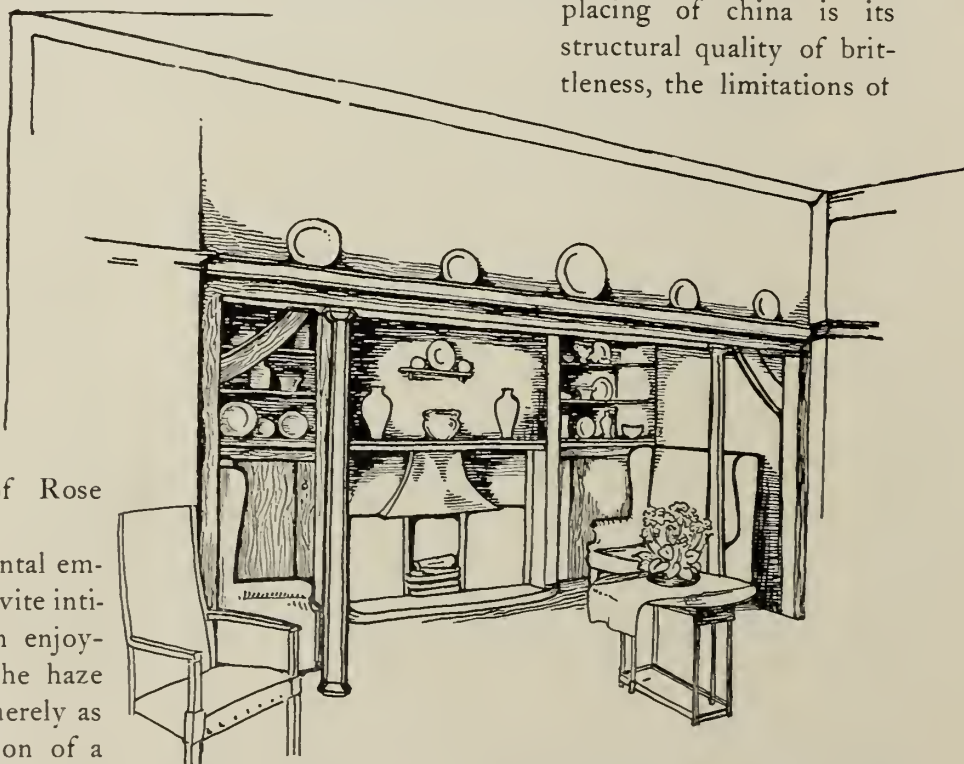


FIG. 9. PLATE SHELVES WITHIN AND ABOVE AN INGLENOOK

its unyielding hardness, and its proportionately heavy weight. A heavy china plate, for instance, needs a firm foundation and never appears to advantage when, held clutched by a slender framework, it hangs by a thin wire from the top of the room and, dangling against the wall, is swayed by every passing breeze. It needs to be placed where it is comparatively free from the risk of accidental displacement, and hence open cupboards or cupboards with glass doors, recesses, cabinets, shelves, racks, dressers and the tops of sideboards have been found the most satisfactory repositories. Within these limits one's taste may find a sweeping range of possibilities for a charming and successful arrangement of a collection of china.

In considering the arrangement from a deco-



FIG. 10. A CHINA CLOSET IN A PASSAGEWAY BETWEEN DINING-ROOM AND LIBRARY
Furnishing what Might Otherwise have been a Barren Space

rative point of view, it is of primary importance to secure, first of all, a suitable background. As has been already emphasized, the decorative design of a piece of china is almost invariably minute in detail, and the whole surface is broken into an infinite number of divisions. Consequently there is only one type of background that will not detract from the decoration of the plate, and that is a background that is practically of one tone of color, or, in other words, that shows no pattern obtrusive enough to dwarf or confuse the pattern of the plate.

This one-toned background may, of course, be of any kind of wall covering, a paper or fabric, or a wood finish painted or stained. Blue china is especially beautiful against white paint, and dull

Indian red paint gives good emphasis to the rich oriental color of the green Fitz Hugh patterned china. Mahogany and dark oak paneling always make a rich and effective background, whatever the color scheme of the china decoration, and neutral tones of papers and fabrics are almost invariably successful.

The advantages that pertain to the use of a

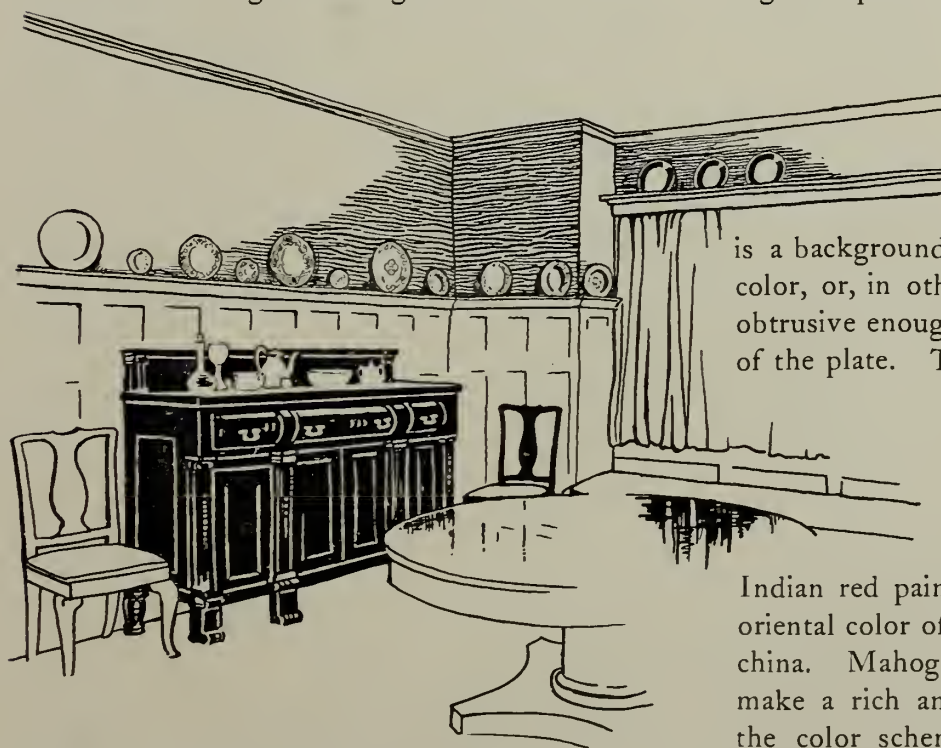


FIG. 11. THE "BORDER" ARRANGEMENT OF CHINA
On the Wainscot are Decorated Plates within Range of Observation. The Plates over the Window are Plain. The Background is Japanese Grass Cloth of a Dull Brass Color



FIG. 12. A MODERN ENGLISH DRESSER

flat-toned background, as opposed to the background of strong pattern, are clearly shown in Figures 1 and 2. In Figure 1 we are scarcely conscious of the fact that the platters on the lower shelf are anything more than flat patches of color, while in turning to Figure 2 we feel as though the atmosphere had been suddenly cleared and the exquisite outlines of the trees emerge as from a mist just lifted.

A good background having been secured, the next question of importance to consider is the grouping of the spots of color. It is beyond dispute that, as a rule, pieces of china are far more effective in mass than dotted here and there over widely spaced areas, provided, of course, that the mass is not an overcrowded mass, as, for instance, in the left-hand cupboard of Figure 4, but shows some coherence and balance of arrangement, as in the cupboards of Figures 1 and 5. Placed far apart each piece of china, as color, loses character

and almost invariably appears weak and ineffective as a wall decoration. The best decorative effect is gained when the china is arranged in panels or borders of color—such panels and borders at the same time being carefully considered in their relation to the proportions of the wall spaces.

Very fortunate is the collector of china who has been able to consider this question in the original plan of his house and so to build that he is sure, not only of obtaining a good proportional arrangement in his dining-room but also of gaining the very best architectural setting for his treasures. There has probably never been evolved a more beautiful and satisfactory repository for china than the corner cupboard or beaufait (spelled variously buffet, bufet, bofat, etc.), that first became the fashion in the eighteenth century, and without which few good colonial houses of the late eighteenth century were built. Figure 3 illustrates two forms of these, now in place in the Antiquarian Rooms in Concord. These cupboards were sometimes open, but often had glass doors, and the arrangement of the sashes in these doors was sometimes very beautiful.

This form of cupboard possessed every quality, practical and æsthetic, that could be desired for a display of china.

It gave safe custody, an effective background and a dignified architectural framing to these delicate works of art. It placed them within range of close observation and leisurely enjoyment. It massed the color in a most delightfully decorative panel. The rounded background lent itself with a certain grace to the form of the curved edges of the plates and the contour of teacups and saucers, and the same is true of the scalloped edges of the shelves, which was the common form of the shelf in the best Colonial "beaufaits." The fashion for these cupboards is happily being revived in many modern houses, and a pair of these in the curve of a rounded wall is shown in Figure 4.

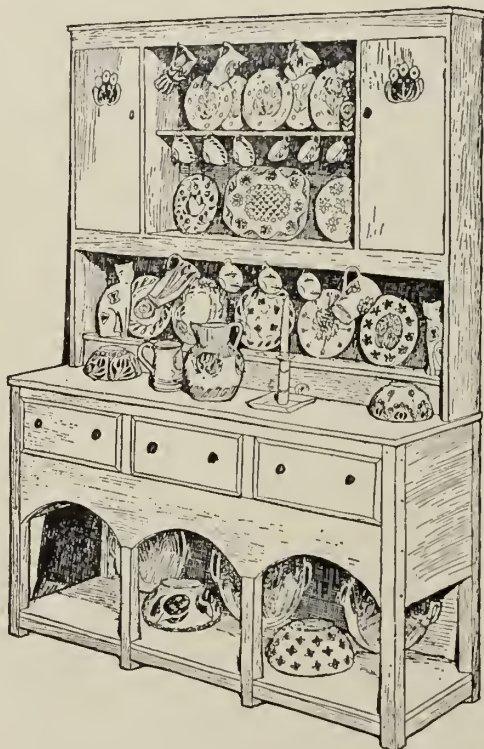


FIG. 13. A DRESSER WITH CUPBOARDS

Incidentally one feels a little sorry for the uncomfortable looking plates that are hung between these cupboards in Figure 4 and wishes that they might have found a safer abiding place, perhaps on a plate shelf, or — were there not so many there already — among their fellows in the cupboard.

The use of cupboards in the space on either side of the chimney is also often architecturally delightful. Figure 5 is an unusually well-considered instance of wall spacing, showing a delicately adjusted sense of balance and proportion. Note the careful consideration of the horizontal lines as well. The wall space is interrupted at as few levels as possible and these interruptions are interestingly placed. Note, too, that the sashes of the doors coincide with the lines of the shelves, making the effect of the cupboards much more restful to the eye than the haphazard interruption of spaces in the ill-planned doors of the cupboards in Figure 7. Figure 8 merely illustrates how easily the relation of these doors and shelves in Figure 7 might have been improved and simplified by a coincidence of lines if the architect had "only stopped to think."

A most effective arrangement of a permanent built-in sideboard, flanked by straight lined, leaded-paned cupboards, is shown in Figure 6. Again the proportions of this arrangement are carefully and successfully considered, these panels and borders of china and glass forming a delightful frame of rich color around a window. Figure 9 shows a less formal arrangement of shelves in a chimney recess, here, perhaps, called an "inglenook," arranged after a design by a modern English architect. The spaces here are also excellently planned. Figure 10 shows an interesting use of a china closet in a passageway between a dining-room and library, thus pleasantly furnishing what might otherwise have been a barren space.

Turning now to the border arrangement of china, used by



FIG. 14. AN OLD INTERIOR CONTAINING THE WALL PLATE-RACK OF THE TYROLEAN PEASANTRY

itself, Figure 11 shows a very simple and decorative arrangement of a row of plates — which stand upon the narrow shelf of a rather high wainscoting — high enough to be out of danger from accident, and low enough to be within range



FIG. 15. A MODERN USE OF THE WALL PLATE-RACK

of close observation. Plain bordered plates of rich color are on the shelf above the window. There is no design on these to study, so they lose nothing by standing up so far up on the wall. The background is of Japanese grass cloth of a dull Russian brass color.

On the mahogany sideboard are grouped other pieces of china and glass, having for their background the dark rich red of the wood. The whole arrangement is rich and dignified from its very simplicity.

Besides these architectural provisions for china, there are infinite possibilities of arrangement of a more temporary sort. The china cabinet that has descended through various forms from the days of Sheraton and his contemporaries in both England and France is such a well-known piece of furniture that it needs no particular comment or illustration here. So long as it is good of its kind it is well suited to its use and makes the good massing of china possible.

The dresser is also a well-known piece of furniture in which interest seems to be reviving, and English and German craftsmen of the present day are developing very simple and charming forms



FIG. 16. OPEN SHELVES FOR CHINA
An Old English Example

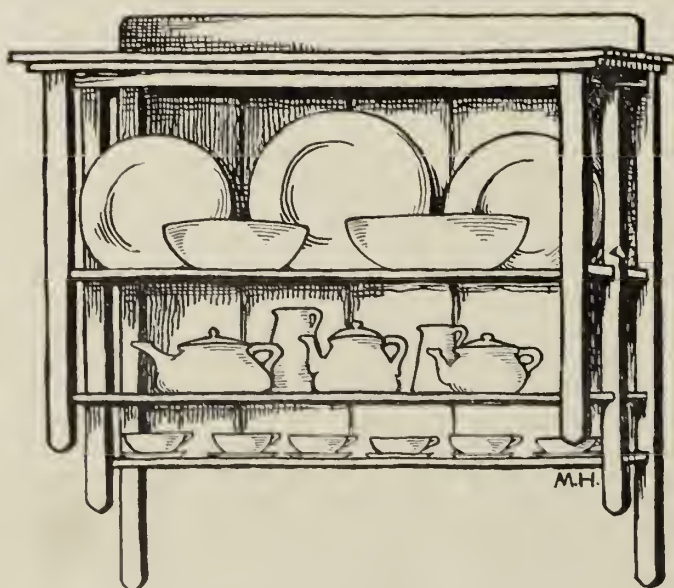


FIG. 17. OPEN SHELVES FOR CHINA
A Modern German Example

of dressers which seem destined to become most desirable factors in the artistic arrangement of the dining-room. Figure 12 is an excellent example of an inexpensive modern dresser that is in a house in Sussex, England. Both that and the English dresser, also modern, designed by Mr. M. H. Baillie Scott, and shown in Figure 13, are straightforward, well-built, well-proportioned pieces of furniture, and with a carefully selected display of china, would, either one of them, form an altogether delightful adjunct to a dining-room.

There is also reviving at the present day a deep and lively interest in the wall plate-rack, which has a very ancient lineage among the Tyrolean peasantry. A somewhat primitive example, dating back many centuries, is shown in Figure 14. But from this crude suggestion one's imagination may evolve plate-racks of an infinite variety of designs, ranging from those of absolutely simple lines to those bearing very rich and decorative carving.

Figure 15 represents a very excellent modern example of these simpler racks, and is commendable for good lines and good proportion. Also to illustrate another popular form of temporary wall repository, there are shown in Figures 16 and 17 two rather interesting examples of open shelves for the storage of china, the one (Fig. 16) having been constructed more than a century ago, probably by either Chippendale or Mayhew, and the other (Fig. 17) within a few years by a modern German architect. Figure 18 shows a very charming combination of plate shelves with a corner seat. The wainscot and the end board give the shelves that appearance of solidity and stability which is so desirable. The curved edges of the supports give grace to the structure, and the divisions have been happily placed so that there is no monotony in the effect.

There might also be devised all manner of wall cabinets, following somewhat the outlines of the very beautifully carved cabinet, a sketch of which is shown in Figure 19. The solid wooden

parts at the back and below the shelf and cupboard lend to this cabinet again the appearance of stability which is even more often lacking in these wall fixtures which are screwed or hung to the wall than in those that are supported from beneath, like the one in Figure 18.

All these wall fixtures, such as racks, shelves and cabinets, if well constructed, form delightful decorative spots of color above the serving table or sideboard, and there is infinite scope for originality along these more or less untried lines, and much beauty of arrangement can be thus obtained at comparatively little expense.

All that the designer and craftsman needs is a proper sense of proportion, a logical sense of fitness and the practical knowledge of his craft. Beyond this he can, of course, add a limitless variety of decorative finish.

Lastly, let us be thoughtful in the selection of the china to be displayed. It is a questionable misfortune that no process has yet been evolved that will do for the masterpieces of china what photography has done for the masterpieces of painting and sculpture. The beauty of china has proved as yet of too elusive a quality to reproduce. On the other hand few of us can hope to possess an extensive connoisseur's collection, but a few well-chosen pieces of china count for so much more in the decoration of a dining-room than a mass that is uninteresting in color, form and pattern, that one should put

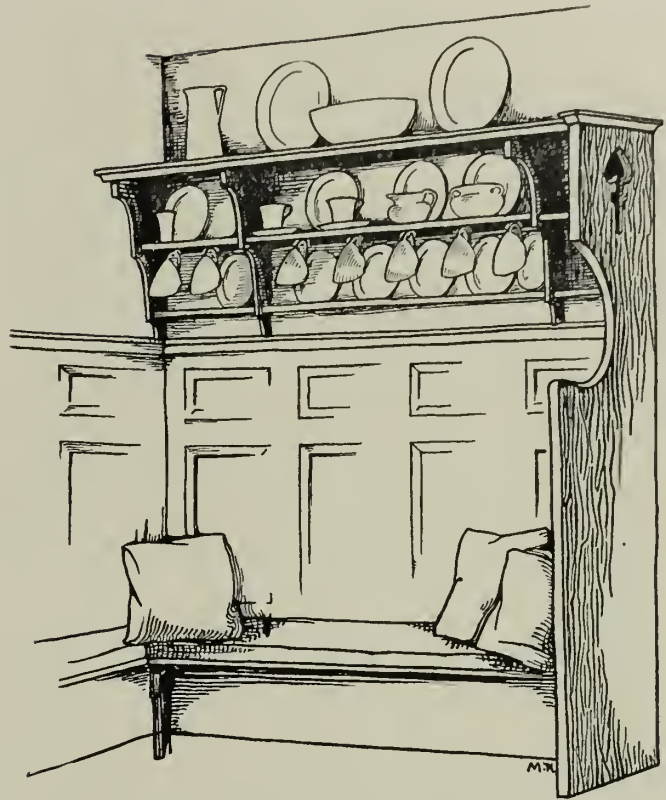


FIG. 18. A COMBINATION OF PLATE SHELVES WITH A CORNER SEAT

one's collecting and decorating impulses under severe restraint, and choose slowly and wisely. This problem presents but another instance where the application of a little thought and care and patience will repay a hundredfold by the increase obtained of beauty and enjoyment.

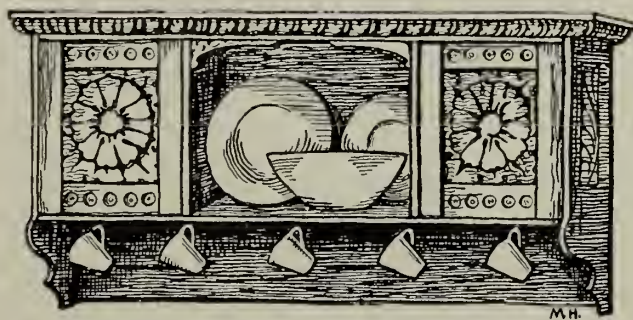


FIG. 19. A CARVED WALL CABINET

HUNTING A TOWN APARTMENT — Concluded

that with many people it becomes a serious question whether the same money could not be used more advantageously in other ways. Especially is this true when, as if to make the higher rentals more reasonable, there is a parade in vestibules and halls of a certain sort of ostentation that is

always offensive to good taste. This is apt to take such forms as much gilt molding, artificial rubber plants and imitation fireplaces. But if one takes pleasure in this sort of thing and is willing to pay for it in higher rental that is one's privilege.

Floor Coverings for the Winter Home

A GUIDE FOR THE HOME-COMING HOUSEWIFE TO THE NEW STYLES OF CARPETINGS AND RUGS

By PAGE DUNBAR

THE tendency in floor coverings is steadily along the same lines it has followed for the last fifteen or twenty years toward cleanliness, ease of handling and artistic effect. Very gradually the old-time carpet, covering the entire floor, is giving way before the rug, and the rug is dwindling in size. The carpet's primary excuse for existence was to secure more warmth. But with floors closely laid and houses steam-heated from basement to roof, there is little need for its services in that line. There must still be many, however, who like the luxurious sensation of a thick-piled carpet underfoot, for, notwithstanding the constant growth of the rug in popularity, the shops all carry large stocks of carpetings. It is noteworthy that these are mainly in the close, heavy weaves, Brussels, Wiltons, velvets and Axminsters. And if one is going to have a carpet, nailed to the floor and left in place for months at a time, the heavier it is and the more closely it is woven the better, for the dust sifts through a fabric of looser texture and lies on the floor underneath, where any amount of surface cleaning can do no more than stir it up and bring it into the carpet again. With any carpet there is bound to be much of this sifting through of dust, but the evil is less with the close and heavy weaves, which hold it more upon the upper surface, where thorough sweeping and wiping with damp cloths can do much to get rid of it.

Plain colors or small, inconspicuous patterns are the favorites in all these weaves. The old-time, large-flowered pattern has well-nigh vanished from the carpet dealer's shelves. People of taste have come to understand that in a restful, artistic room, the floor must be kept in the background. If the carpet does not carry out some light-toned scheme of coloring, it should be dark, inconspicuous and harmonious. In very large rooms a patterned carpet with a large, bold design is not out of place. But in the small or medium-sized rooms, in which the majority of people live, plain colors on both floor and walls increase the apparent size and also, very much, the restful effect. The prices of these several kinds run from a dol-

lar and a half to three dollars per yard, about the same for each kind, according to quality. In the plain ones there is a great variety of very beautiful colors,— deep, rich greens, blues, reds, browns and soft dull shades of gray, blue, old rose, sage green. So numerous and varied are they that it would be possible to carry out in the carpet almost any color scheme. These same varied and beautiful colorings are found in the groundwork of the patterned carpets. In these the patterns are nearly all either small figures, flowers or irregular, inconspicuous designs.

In cheaper materials there are "ingrain fillings" and "terry" weaves, in plain colors, all wool, from seventy-five cents to a dollar per yard. There is also a material that masquerades under a variety of names, but is most commonly called "drugget" or "dhurrie," which is half cotton and sells at from fifty to seventy-five cents per yard. The "rag-style" carpetings are also in much and growing favor with those who like unconventional floor coverings. But all these materials are much more suitable for rugs, for the dust is apt to sift through them and make necessary a frequent cleaning of the floor beneath. Being comparatively light in weight, they are easily handled, and their thorough cleaning is a quick and easy matter. In all the shops rugs of any desired size from these materials will be sewed together and hemmed, the charge being according to the yards of sewing. In the rag-style weaves there are some new designs, mottled effects having taken the place of the plain colored warp and white woof formerly so popular. They are made by mingling together dark and light shades of the same color, and are shown in green, brown, red and blue. The brown, which is a new coloring in this material, has a very pleasing effect, with its irregular, mottled shadings from light to dark. Some of the shops are showing rag-style rugs of the five by eight-foot size, with fringed ends and a broad band across each end of irregular figures in bright, contrasting colors. The rag-style carpeting costs from fifty cents to two dollars per yard, according to width and quality.

In the heavier rugs the tendency is constantly, as floors improve in quality, toward the smaller sizes, to be used sparingly about the room. But there are still in all the shops immense quantities of the large sizes, eight feet by ten, twelve or thirteen, six feet by nine, and all the usual sizes, in Axminster, velvet, Wilton, Brussels and "amaxin." The reversible Smyrna rug, of domestic weave, is also quite a favorite, as it is cheaper than the others, but is durable, and in the better qualities shows very soft and beautiful colors. This type of rug varies from ten to thirty dollars in price, according to size and quality. The Brussels rugs run from twenty to thirty-five dollars, the Wiltons and velvets from twenty to forty, and the Axminsters from fifteen to thirty-five. These prices are for those varying in size from six by nine feet to nine by twelve. In the French Wilton and Anglo-Persian rugs the prices, for the same sizes, run up to from fifty to a hundred dollars. And beyond that, of course, one can pay for oriental rugs as many hundred dollars each as purse and inclination can compass.

All these weaves come in the small sizes at from five to twenty dollars each. One notes the growing proportion of plain-colored rugs, although there are many with patterns, some with small and dainty designs and others showing a perfect riot of intermingled figures. In the "amaxin," mohair and Axminster there are very

beautiful plain-colored rugs, in the greatest variety, in all sizes, with a border in a very dark shade of the same color. A superior quality of the "amaxin" rugs, varying from nine dollars for the three by five size to fifty for the nine by twelve, is so beautiful, with its rich, soft coloring and velvety surface, that it is used for decorative purposes as well as for the floor.

So general has become the preference for rugs over carpets that many devices have been contrived to improve the surface of floors. One of these is a sort of wax-like filler that is spread over the floor, filling up cracks and making an even surface with a hard, high finish. Most satisfactory of all these is the parquet hardwood flooring laid down over another floor in plain or patterned blocks that can be had in whatever thickness is desired. It makes a perfectly smooth, high-finished floor, without a crack or crevice for the gathering of dust. It can be put down over any floor, new or old, for a little more than the cost of a good carpet. Failing this, floors otherwise impossible are made ready for rugs by covering them first with matting or linoleum. A good quality of matting is rather prettier than the linoleum, but the latter is the more sanitary, for dust goes through the matting in wondrous quantities and lies on the floor beneath until the matting is taken up. But the linoleum, being quite impervious to dust, can easily be kept perfectly clean.

THE walls of this house above a base of concrete are of rough, hard bricks covered with pebble-dashing. The roof is of tile. The view shows the entrance front, where the veranda lies snugly within the outline of the house. The bay-window provides a delightful place for flowers in the drawing-room. This room may easily be united with the hall, on occasion, by means of broad folding doors.



AN INEXPENSIVE HOUSE

The dining-room is withdrawn from the house entrance by means of a single door near the rear of the room. The study is secluded and has the garden for its outlook. Grouped about the kitchen are a larder, storeroom and serving pantry. The house could probably be built away from town for about \$8,000, and if wood framework were used for the walls above the first floor this cost could be reduced.

Upstairs, Downstairs, in Living-Room and Chamber

BY CHRISTINE TERHUNE HERRICK

THE American housekeeper has even yet hardly escaped from the tradition of the "best room." Whether she acknowledges it to herself or not, the drawing-room is probably her first thought in arranging her house. To have that as it should be, not so much for her own sake or that of her family as for the effect it will have upon visitors, is to her of paramount importance.

Next in consideration comes the dining-room or, possibly, the library, while, as a rule, the essentially family rooms, more or less haltingly, bring up the rear. They can have what is left.

For my own part, I have always revolted against the tyranny of a "best room." I don't like showy drawing-rooms downstairs and a family sitting-room upstairs. I recognize the necessity of a workroom where the women of the family may do their sewing, or of a library or study where the students of the household may seek retirement, or of a "den" where the lord of the manor may smoke in peace. Also, I see the desirability of a state apartment for receptions in a household where elaborate entertaining is done.

But that most of the beauty and elegance of the house should be concentrated in one room, and that one in which the family never thinks of gathering socially unless there are guests with them, repels me. I have never seen such a room that had in it the suggestion of real comfort and ease. It may be like Rawdon Crawley's "gilt and splendid parlours." It is not a little bit like a home.

Even in a household where there are small children they may be taught a measure of respect for the things that must not be touched. If they wish a place for rough and tumble play other than their nursery, they may find it in their mother's sewing-room. When the children are grown, I am unable to see the least reason for an "upstairs sitting-room," which so many persons seem to regard as necessary. Let the family sit in the drawing-room and have there the books they are reading, the late magazines, the pretty work-box containing the bit of fancy work that is taken out in the evenings. All these adjuncts go to make the place like a living-room where people really *live*, — not a cold, dead "drawing-and-quartering-room," fit only for formal functions.

All of which does not mean that the familiar and intimate objects, which possess no merit except to the owner, should be congregated in the drawing-room. It is to be the apartment in which to receive intimate and unintimate guests, as well as the place where the household will meet. The members of this can reserve their most cherished possessions for their own rooms and keep out of the general place of assembly those things that speak of their immediate thoughts and interests.

One young woman of



THE BOUDOIR OF MRS. ALICE ROOSEVELT LONGWORTH



A BEDROOM WITH ALCOVE CONTAINING ONE'S FAVORITE BOOKS
Chapman & Frazer, Architects



A BEDROOM WITH GLAZED CUPBOARDS
Behind the Doors screened with Silk are Personal Trophies and Objects of Intimate Association
Stone, Carpenter & Willson, Architects

my acquaintance objects strenuously to having a Bible or prayer-book on the drawing-room table. "These books are sacred," she says. "They belong with moments of prayer and meditation, and are out of place in a room where neither one of these things is supposed to take place." For much the same reason she

refused to have hung in her drawing-room a very beautifully inlaid crucifix a friend had brought her from abroad. "I do not wish to see the image of the world's greatest suffering in a room where there may be card-playing and dancing and all sorts of merry-makings," she said. "It is incongruous." And I incline to think she was right.



A DEN IN AN ATTIC
Myron Hunt, Architect



A FIRST-FLOOR DEN
Philip B. Howard, Architect

In the bedrooms and personal apartments, then, should go, not only such objects as these, but also the other things that belong to the intimate side of the owner. Here is the place for family portraits, photographs of friends and relatives, souvenirs of past joys or sorrows, pieces of handiwork, prized because of their maker or of their associations and having little other value. The personal trophies belong here, too,—the cards, the prizes, the droll souvenirs—all that has no part in the general meeting place. The young girl or the lad of the family usually has a healthy disregard of microbes, and thinks nothing of the fact that the cherished collection of remembrances is a nesting place for dust and bacilli.

If the mother of the house possesses a fair share of common sense and could have her own way, she would like to alter all that. Without going so far as some enthusiasts who banish from a sleeping-room everything that might serve as a lair for germs of any sort, she would study to have her chambers rather plain in effect, using on the bare polished floor rugs that could be taken up and shaken; at the windows, light draperies that might be washed whenever they needed



A DINING-ROOM WITH A WINDOW SEAT
Enclosed within an Attractive Design of Woodwork
Newman & Harris, Architects



A SPACIOUS DINING-ROOM WITH SUN PARLOR ADJOINING
Chapman & Frazer, Architects



Grass Cloth Walls and Restrained Woodwork

Philip B. Howard, Architect

"LIVING-ROOMS WHERE PEOPLE REALLY LIVE, —



Natural Finished Wood and Sturdy Brick

Myron Hunt, Architect



Light Walls and Hangings of Vigorous Pattern

Adams & Warren, Architects

NOT COLD, DEAD, 'DRAWING AND QUARTERING ROOMS,'
FIT ONLY FOR FORMAL FUNCTIONS''



A Room for Talk, Music or Reading

J. B. Noel Wyatt, Architect

it and putting an embargo upon dust refuges of any kind.

Of course every woman has her own idea of what she wishes her bedrooms to be. The present most popular fashion seems to be for coverings made all in one piece and extending from the foot to the head of the bed, taking *en route* a log of wood or something equally unyielding in bolster guise which, placed at the head of the couch, deceives nobody and has so little beauty or use that one marvels at its acceptance by persons of taste and good sense.

I know that I expose myself to the accusation of owning neither of these qualities by such remarks — but I am open to conviction. If any one will show me the wisdom or beauty of this fancy I shall be glad to be converted. Even the detestable pillow shams of old — which, I am told, are “coming in” again — had more excuse. They, at least, served to conceal pillows that might have been tumbled by the sleepers the night before. Where are those pillows now? Stowed away in a closet awaiting the time when a tired housekeeper or maid shall bring them out, unaired, and put them back on the bed in place of the “bolster” she stands in the corner of the room for the night. I recognize as well as any one the unattractiveness of creased and rumpled pillow slips, but my own preference would be to exchange these in the morning for fresh slips that could be taken off again at night. Then the bed would have the look of a chamber furnishing and not of an imitation of an upholstered couch.

The use of brass and iron beds had become so general, that of late fashion has felt that, for a change, wooden beds must be restored. I grant that they are warmer and if one has heirlooms in this line it is foolish to discard them. But the iron beds are lighter, cleaner, more sanitary, more easily kept in order. They have also the decided advantage of going with any variety of bedroom furniture.

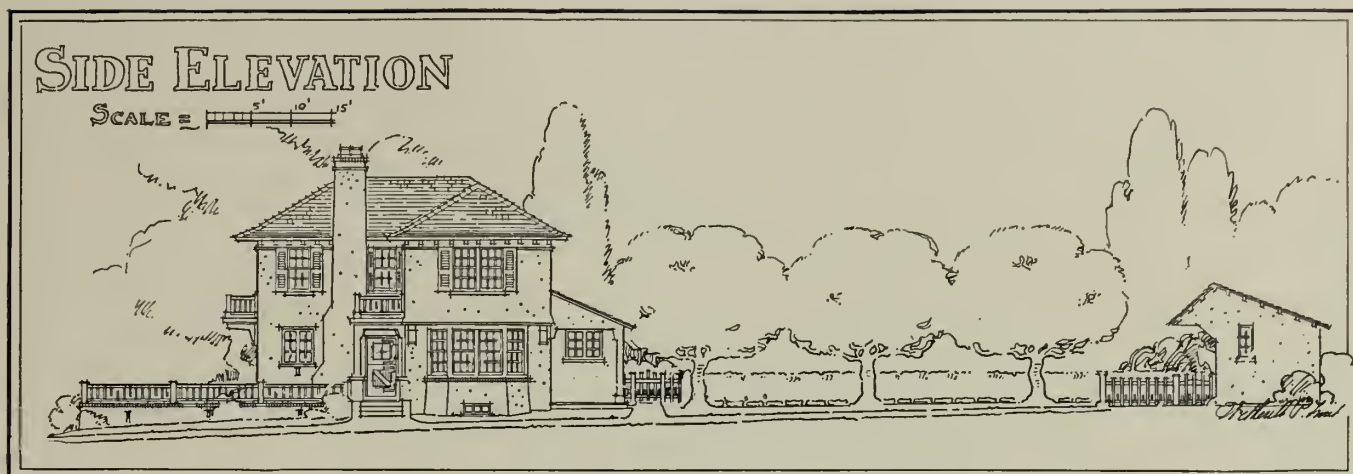
If one has one's choice of this for a bedroom, it should be light and simple. Again, no dust harborers! Simplicity and a general effect of restfulness should be studied. Figured papers in set designs are a nightmare in a sleeping-room. Any one who has ever had an illness in a chamber with a wall covering in mathematical lines and figures can speak strongly on this subject.

I have already referred to the curtains and the

pictures. Portières there should be none unless of some light fabric that will not hold dust. For choice, one would hang on the wall, besides the family pictures of which I have spoken, a water color or two, a few good photographs or reproductions, a couple of Japanese prints. The preference of the inmate of the room they should always be, — if he or she is possessed of preferences. Whatever is put into the chamber at the outset is pretty sure to be modified in a short time by the taste and tastes of the one who occupies it.

In every home there ought to be a sort of “House of Refuge” for the objects no one wishes in his or her own room and yet that some one is unwilling to have thrown away. In a home that I knew, a lively young girl dubbed such an apartment the “Chamber of Horrors.” Yet it was odd how the members of the family gravitated to it. It was a big, light room, and on the floor was a Brussels carpet covered with large sprawling bunches of flowers, — a carpet that was too good to throw away and yet that was suitable for no room in the house. In this day it would have been dyed, but this was not done in that era. There was an old sofa in one corner, haircloth covered and a bit bumpy as to the springs, half a dozen chairs — Boston rockers, patent rockers, and haircloth covered rockers — stood about the room. On the wall were the pictures that had always been in the family. Chromos, some of them, old steel engravings, faded-out oil paintings that had once been deemed valuable. If I am not mistaken, a Rogers group stood on the mantel and I know there was a hairy rocking-horse in the corner and stuffed birds on top of the what-not. Nothing in the room could be damaged much more than it was already, and the children and young people flocked to it.

Such a room as this is a boon to those of a sentimental or a thrifty disposition. The two traits work in much the same way. They incline their owner to save things that from a purely practical point of view are not worth saving. If mingled with the sentiment or the thrift, there is a sense of incongruity or of taste that will hinder the possessor of these contradictory virtues from keeping the old treasures too much in evidence, the result is not bad. It is only when one or both virtues are lacking that the house is likely to be a trial to all but the woman who has arranged it.



THE INDOORS AND OUT SERIES OF MODERATE-COST DWELLINGS

Especially designed by Skillful Architects for Readers of this Magazine

Number Four—A House for a Servantless Family

WETHERILL P. TROUT, ARCHITECT

TO build well and cheaply has never been more difficult than it is to-day. With the prices of labor and materials constantly soaring, the problem of cost is, of all his problems, the one which gives the architect the most concern.

This is sometimes due to the fact that the client has a more vivid idea of his desires than of his actual needs, and in consequence his demands quickly exceed the limit of cost he has set for the contemplated building. The opening of estimates disclosing high figures too frequently marks the death hour of many a prospective house and the smothering of long-cherished hopes. If the building project is not altogether shelved, the "hacking" process invariably follows, whereby plans and specifications are altered, omissions are made and every opportunity is seized to reach the figures originally set aside for the undertaking.

If, therefore, these disappointments and delays are to be avoided, it can only be accomplished in the very beginning by resorting to a system of practical economy while the plans are being formulated. Necessary features only should be incorporated, dimensions of rooms kept down to minimum sizes and nothing but the simplest materials and finish should be given consideration.

The little house, the subject of this article,

has been planned for the needs of a small family that does its own housework, independent of outside help. Economy of size, the arrangement and number of its rooms, have been studied with an eye to meeting the conditions and purse of its supposed owners; and while an attempt has been made to give the exterior a pleasing aspect, simplicity has been the keynote of its architecture.

The lot selected upon which the house is to be placed is $37\frac{1}{2}$ feet wide and 150 feet deep, or one-half of three 25-foot lots, such as may be purchased from any of the land operations that flourish in the vicinity of our larger cities. The ground falls slightly towards the front and faces generally the southwest.

In conformity with the building regulations of the locality, the house is placed 25 feet from the front line of the lot and 3 feet (the minimum legal distance) away from the party line on the left. This arrangement gives all the principal rooms in both the first and second stories an abundance of light and air, and allows space for a narrow roadway on the right leading to a small stable in the rear.

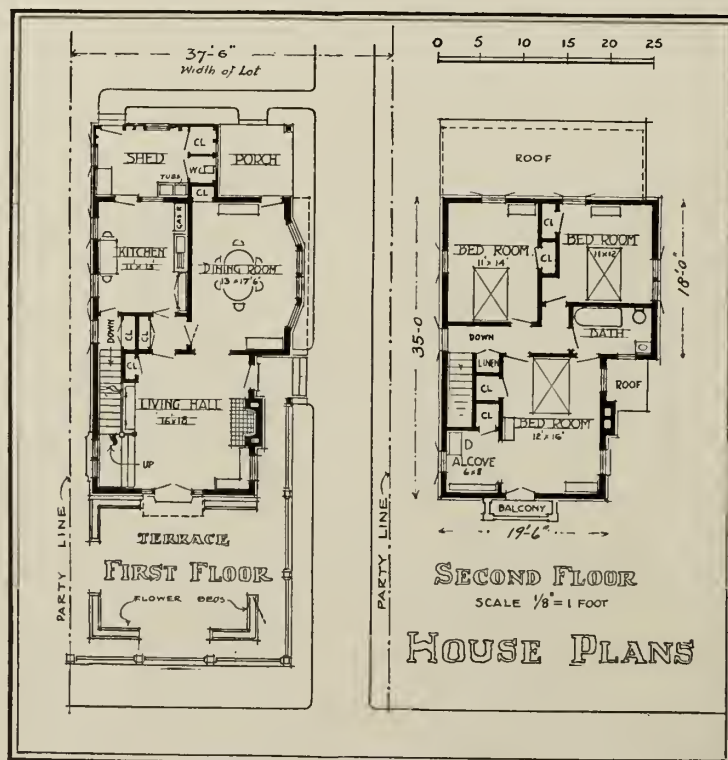
The house consists of eight rooms, including the laundry shed and the bathroom. In place of the usual piazza at the front entrance, there is an open terrace raised several feet above the pave-

PERSPECTIVE & SKETCH OF HOUSE



ment; but a covered porch protects the entrance door, and there is also a porch at the rear of the house, reached from the dining-room and overlooking the garden. The former, or, indeed, both of these porches, may be protected in winter by enclosing with glass sash.

The entrance door opens directly into the living-hall, where there is a generous fireplace, opposite which is the stairway. At the front, case-



ment windows, opening to the floor, lead to the terrace.

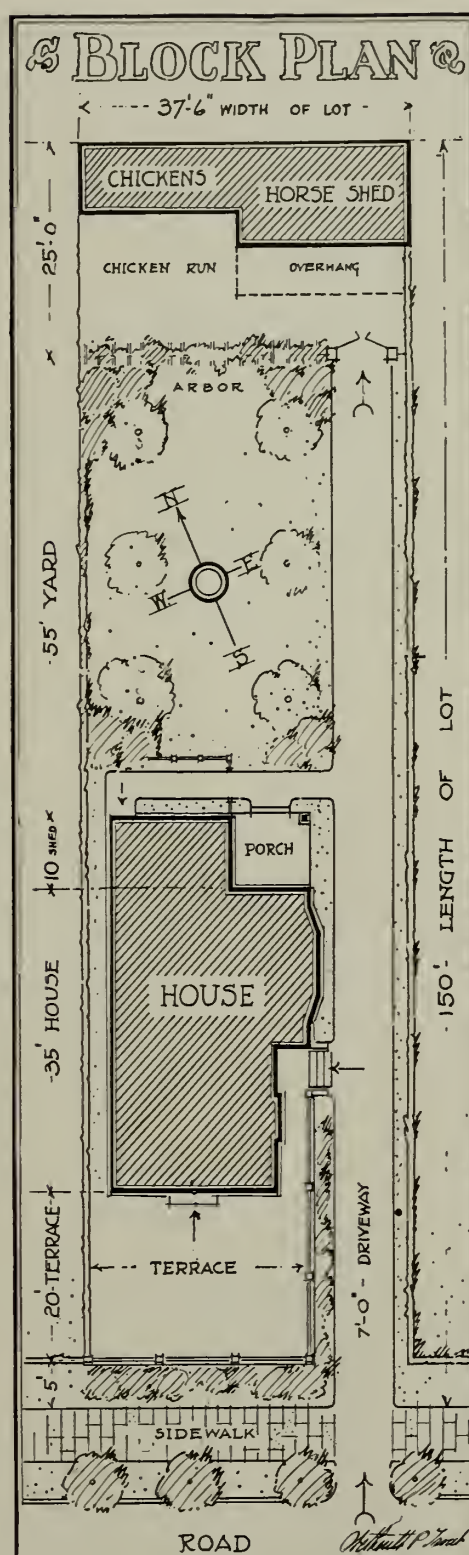
The dining-room opens directly from the hall and has, as a special feature, a broad bay window along one entire side facing both the east and south.

A large serving pantry is dispensed with, but a small compartment is provided to retire the kitchen from the living-hall and to contain closets for china and glassware. The kitchen is provided with a

large double-oven gas range and boiler above to supply hot water to the sink, adjoining laundry tubs and the bathroom. The cellar stairway is of easy access and is lighted by a window which lights also a large closet at the head of the flight. The laundry shed connects with the kitchen, and the floor of each may be at the same level. The closets in the laundry have high-up windows so that their presence is not objectionable to the porch.

The second floor contains three bedrooms, each having a closet and a window on two sides of the room. The front room is particularly cheerful on account of a large dressing alcove with closet at one side, and long, French casement windows opening to a balcony overlooking the terrace. The bathroom is connected with this room, but has another entrance from the hall.

The cost of the house would naturally vary greatly with the locality, the presence of building laws or other restrictions, the market price of materials and the kind of builders who would undertake the work. In distant suburbs or rural localities, there are often very good builders who have but little work on hand at a time, and devote their own manual labor to each house, obtaining their own assistants and adding or decreasing the force from week to week. A responsible city builder has given the following approximate schedule of prices for which, in his judgment, such a rural



builder as described could profitably erect the house.

Excavation,	\$75
Tile and ditching,	50
Mason work, foundations,	150
Face stonework,	175
Chimneys,	125
Rough lumber,	648
Doors and windows,	300
Nails, paper, flashing, etc.,	100
Wood flooring,	160
Plumbing,	400
Heating (hot air),	150
Electric wiring,	75
Plastering,	224
Shingles,	158
Rough millwork,	200
Interior finish,	300
Fireplaces,	30
Finished hardware,	75
Stairways,	100
Painting,	175
Tile work,	50
Cement floor,	80
Carpenters' labor,	1,000
Scaffolds,	20
Sundries,	50
	<hr/>
	\$4,870
Builder's profit, 10%,	487
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	\$5,357
Terrace,	475

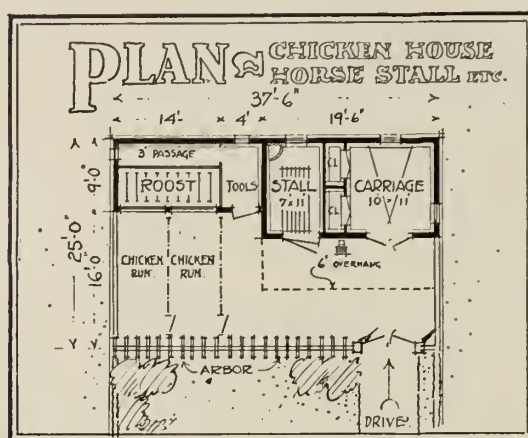
DATA UPON HOUSE

Area of first floor,	928 sq. ft.
Area of second floor,	762 " "
Total floor area,	1,690 " "
Area of terrace,	552 " "
Cubic contents from middle of cellar to middle of attic,	23,000 cu. ft.
Mean perimeter of house,	127 ft.
Number of windows,	28
Number of doors,	23
Cost per cubic foot on above estimate,	23.29 cents.

Those who live in the suburbs are sometimes disposed to set apart a portion of the grounds for raising poultry or pigeons, and space is usually found in the rear of the lot where the owner is fancy-free to

devote his time to these pursuits. But as a rule, the keeping of a horse for pleasure driving, or an automobile, is a luxury beyond the means of the tenant living upon a property of such modest proportions. It is only when the owner is his own willing hostler or chauffeur that it is possible for him to indulge his enthusiasm in this direction.

A small stable, or garage, and a chicken house are suggested, and are of such proportions as to require the least care. It is advisable to



confine these in a department by themselves, away from the house. A space 25 feet deep by the full width of the property (37½ feet) is allotted to them and fenced off by an arbor. A generous overhanging of the roof protects either horse or automobile. The chicken house is built against one end of the stable and is protected on the north and west by a solid

wall, while the other sides admit the entire range of sunlight. A small compartment for a lawn mower and other garden tools is provided.

The Winter Hill Gardening Contest

WHEN the Winter Hill Improvement Association of Somerville, Massachusetts, first planned a Garden Contest last winter, that should open in the spring, there was considerable fear on the part of the committee in charge that it would prove a great burden, or perhaps fall through, for lack of contestants. It was with trepidation that they planned to offer forty prizes for the best kept premises in a section of Winter Hill that was sadly in need of civic improvement.

Any person already having a garden, or any person intending to make one during the summer, was eligible to enter this contest. The conditions barred out all people who had their gardens regularly cared for by hired gardeners, thus leaving it to small landowners or those who rented their homes to try for a share of the \$200 prize money.

A great load was removed from the committees' minds, when, at the end of the first day, the circulars announcing the contest were sent out, forty applicants had entered the lists, and in a few weeks the number had increased to nearly eighty. Surely this contest would not fail for lack of contestants.

The two hundred dollars announced to be given away in prizes, also was a source of worryment to everyone for a short time; but it was soon found that public-spirited people responded gladly to the appeal, and the money for the prizes and other expenses, together with the interest of contestants, made success apparent in the early summer.

The topography of the contest section and the unsettled fields and ledges, the unused quarries, brick



THE GARDEN AWARDED THE FIRST PRIZE

yards and gravel beds, made a most diverse set of conditions. There were homes perched upon the edge of precipices several feet high, and at the foot of these huge cliffs were other homes set on the bottom of a former quarry, where earth had to be brought to make any sort of a garden. There were gardens in streets that had been "improved" for thirty years, and there were gardens in streets that had not yet been accepted by the city.

As a rule the gardens were not extensive, although there were some occupying several city lots.

The garden taking the first prize is remarkable for the varieties of flowers during all seasons, and the excellent taste as well as painstaking care of the owner.

One of the prize gardens surrounded, at several altitudes, the home artistically situated on a cliff. The contestant brought all the earth and filled in little rockeries and boxes made in niches of the rock which rose perpendicular from the walks and paths. In these artificial gardens he set out many native ferns and flowering plants, with the aim of keeping a succession of native foliage and flowers from the earliest to the latest varieties. Beautiful clover plants spring directly out of crevices in the ledge, also golden-rod, violets, columbine, many varieties of ferns and other plants that he has laboriously set out, not waiting for nature to sow a chance seed. On a little flat surface he raised strawberries for the family use, and later had potted plants there, while on another nearby flat surface are tomatoes and cucumbers. But the chief wonder of the



THE GARDEN AWARDED THE SECOND PRIZE

Located on a Rocky Hillside, where (at the left) a veritable Rock Garden was made

place is the very steep slope of sod that he has cultivated and keeps in such perfect condition. Many more details have been carried out that one can see at a glance must be done, to transform a mass of rock into a beautiful, flowering rock garden.

Other gardens made on rocks may be found. In one, the owner has raised several quarts of strawberries and other edibles, having also brought the soil and put it on a very jagged piece of ledge, where the earth sank into pockets and crevices, and thus gave room for roots to grow.

Another garden built on a perpendicular cliff, had all the earth brought from a distance and filled in on a slope, at the top of which was built a summer house for the landlord's children to play in, and the whole slope was given over to



TWO VIEWS OF THE PROPERTY WHICH WON THE THIRD PRIZE

grass, in which were set out some pine trees, and vines and plants, at the base of the summer house.

In another street a man had bought a piece of low land that had been used by the city for a dumping ground, and on which he built house, stable, carriage house, and made a vegetable garden in which, among other things, he raised a seventeen-pound cabbage. He calculated that from this vegetable garden he had sold enough to pay the taxes on the land, and would have enough vegetables for the use of his own family, which is a large one. Spinach was the first crop, and there came a succession of many things through the summer season, and now the garden is well filled with cellery, cabbages and other winter vegetables. This intelligent method of gardening has been productive of great results the first year.

One pretty effect was carried out by one woman, who made a rockery on a piece of concrete by building up loose stones. This rockery was made to assume twenty-one different aspects throughout the season, beginning with crocuses and other early spring flowers, then tulips, violets, narcissus and so on, ending with chrysanthemums, small myrtles and ivies.

Another prize garden has produced a great variety of late roses and can be truly said to be

the home of the veritable last rose of summer, and even autumn. This garden has a roomy, restful grape arbor in the center, and is the playground for a family of five children who have been trained to properly keep the place in order.

The garden of an old lady past her seventy-fifth year has been the wonder of the passer-by, having been a succession of bloom for several months, and the devices for keeping out cats and dogs, the methods of training vines and tall plants are most ingenious. This lady, though living in a main and much traveled thoroughfare, makes such friends of the children that they never disturb her plants.

Many people who entered the contest, own their homes, while many more rent them. One man has planted and taken care of a hedge around a corner lot, and has made many other improvements which his neighbors and landlord enjoy. Another man takes care of a vacant lot beside his house, and others keep up their places from civic pride and not a desire of financial gain.

Interesting stories could be told of each garden in the list, but the great story of all is that one hears on every side: "There has been a great improvement in my neighborhood this year, owing to the Garden Contest." E. M. W.

What to do with the Walls

BY GEORGE HAYWOOD

IF a house is old and the wall papers have won favor in the family through the intimacy of being daily seen, they may in most cases be cleaned by a careful sweeping down with a soft feather brush. Where they are smoked beside radiators and heat registers, the task is not so easy; and elsewhere dust from highway or from a nearby railroad may have long collected and remained, while permanently marring the paper by "burning in," as the paper-hangers call it. In each large city there is likely to be at least one skillful workman who can clean nearly every kind of wall paper. But, frankly, what is the use? A change of dress for your room is as desirable as a change of dress for yourself, and the chief advantage of wall paper is its transitory beauty and the

ease of ever changing its form and color, and hence the entire aspect of the house.

Without attempting to advise along the lines of design, color and artistic effect of papers, — a subject which is far too large for our limited space, — a few practical hints will be given with which it is well to be supplied in any consultation on repapering, whether it be at a council within the family or with the paper-hanger.

A first consideration is cost. A well designed house, costing from \$10,000 to \$15,000 in a near suburb of a city, can scarcely be papered in good taste, in keeping with its architecture, with paper costing less than seventy-five cents to one dollar per roll: this for the chief rooms of the first floor. Suitable chamber papers may be had at from

thirty-five to fifty cents. For the downstairs rooms, unless one spends more than the above amount, he must content himself with American designs, as the English and French papers, with the exception of a few two-toned designs, range from \$1.25 a roll upward. Chamber papers of English make may, however, be had at fifty cents and upward. The French papers come somewhat higher.

The cost of applying a roll of paper is thirty cents. The wall should first be sandpapered and sized, and this costs seven cents per roll additional. High-grade papers should be backed by first applying a cheap blank paper. In the case of burlaps and similar manufactured products this is essential in order to insure adherence. Burlap averages two dollars a roll in cost, while the beautiful Japanese grass cloth costs \$3.00 a roll, and, as in the case of burlap, \$1.00 additional for applying.

The quantity of paper required for a room is calculated in various ways. First, it must be remembered that a roll of paper on which all prices and estimates are given, measures, when the selvage is removed, $1\frac{1}{2}$ feet wide and 24 feet long. Although many American papers come in lengths half as long again as this, and English papers 48 feet instead of 24, the single roll remains the standard recognized measurement for wall coverings. A roll, therefore, contains 36 square feet. By taking the square feet to be covered in the room and dividing by 30 instead of 36, the result will give the number of rolls required, with safe allowance for the waste which will occur in cutting around windows, doors and mantel, and the amount discarded from the end of each piece.

Another method is as follows: Assuming a room to measure 14 feet x 12 feet, and to contain two windows each 3 feet wide, and one folding door 5 feet wide, the perimeter of the room comes to 52 running feet; with openings subtracted it nets 41. Paper being $1\frac{1}{2}$ feet wide, twenty-eight strips will be required, to which should be added about three pieces to cover waste in matching the pattern and otherwise fitting around the openings. This makes a total of thirty-one strips. Assuming the room to be 10 feet high, a single roll will supply two strips, and therefore sixteen rolls may safely be counted as necessary for the room.

The modern practice of treating the ceiling is to paint it; but if paper is desired, the quantity can be figured in the above manner without allowing for any interruption in the ceiling area or waste caused by it.

The question of painting walls in preference to papering often arises. Some eschew papers for sanitary reasons; but if papers containing arsenic, as do many of the Japanese papers, be eliminated from consideration, the sanitary argument is certainly far fetched as applied to a dwelling-house maintained with average care. There are other reasons, however, why a painted wall is sometimes to be preferred. In imposing rooms where architectural effect is to be gained, in more or less public halls and in such rooms as the bathroom, kitchen and laundry, where vapor is generated, the advantages of painting with oil are obvious. Four or five coats should be applied, and the cost of so treating a wall will be about three times that of applying a one-dollar paper.

Painting with water color mixed with sizing is sometimes expedient though rarely satisfactory. A pigment mixed with whiting and size, and dignified by the name of kalsomine, may be put on in one application, and the cost of doing so in one room of average size (15 x 15 feet) is about \$5.00.

The above methods of treating a wall are, of course, the old and tried ones. The architectural design of a room produces new conditions and suggests new methods and materials; while in rooms that have no architectural design an effect which is a good substitute for it may be obtained by papering in panels, applying burlap or some of the excellent manufactured products similar to it, with a molding nailed over the joinings. Carried across the top, a similar molding may make a frieze effect at any height. Another suggestion may be obtained from the Japanese interior where flat bands of wood about four inches wide are applied vertically and horizontally to form panels. Many panel effects and architectural designs are now simulated in the wall paper itself. In fact, so numerous and varied are the designs to be had that it is futile to describe them; it remains for the person of taste to combine them effectively and to hit upon ingenious methods of using them, which will be original, and at the same time permanently pleasing.

A House for a Narrow Lot

THE NEW RESIDENCE OF HENRY B. McDOWELL, ESQ., CAMBRIDGE, MASS.

Gay & Proctor, Architects

THE narrow building lot which is destined to be the site of a moderate-sized suburban house imposes several conditions for the future dwelling. The most insistent is that the windows of important rooms be as far away from the boundaries of the lot as possible. This for the sake of outlook, which is, at best, limited.

If an adjoining lot is not yet built upon, an element of uncertainty is added. What the neighboring house of the future is to be, how it will be placed, on which side will be the most space and outlook, it is only possible to speculate upon. But the man who builds first can reduce his chances of future dissatisfaction if he places the outlook of his house in the directions where the conditions are already fixed. Upon the uncertain side it is best to expose a façade which cannot be easily injured; that is to say, whose

windows are not so vital to the interior plan, that if shut off by a newly-built party wall close by, the dwelling would be rendered gloomy and uninhabitable.

These conditions have evidently governed the design of the house illustrated. The interior plan is unusual and exhibits no little invention. The left side, it will be seen, is prepared for any fate as a result of building operations next door, while the well-shaped rooms and rows of windows, and even bays, look out on the right side, to the front and to the rear of the lot.

English in design, the casements filled with picturesque diamond panes, the porch offering protection to the stranger by its overhead trellis, the overhangs at the second floor level, the additional horizontal line at the base of the gable, and an absence of tawdry ornament and undigni-



THE HOUSE FROM THE VACANT LOT BESIDE IT



THE LIVING-ROOM SEEN FROM THE DINING-ROOM THROUGH AN ARCH OF CYPRESS
STAINED A WEATHERED BROWN

with a rough-cast finish of a pleasing, warm, gray color. The roof is covered with shingles stained moss-green, the trimmings and blinds being a slightly lighter green. The sash are white.

The hall and staircase lie apart. A broad door leads from the vestibule into the reception room, whence a still broader opening leads to the living-room. From this the dining-room opens through a wood arch, with low sills on either side.

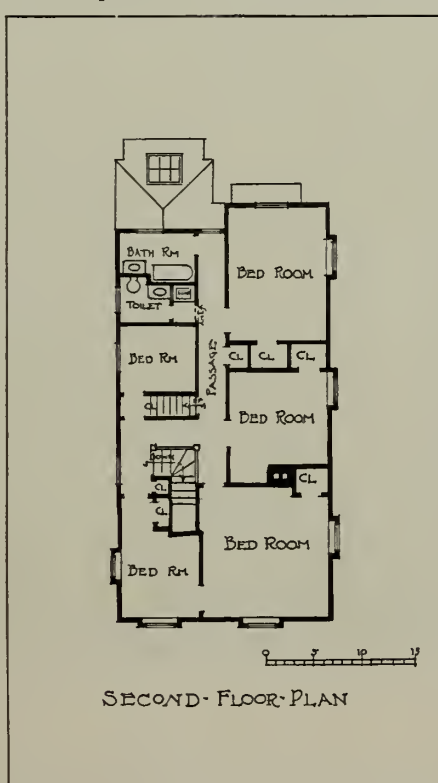
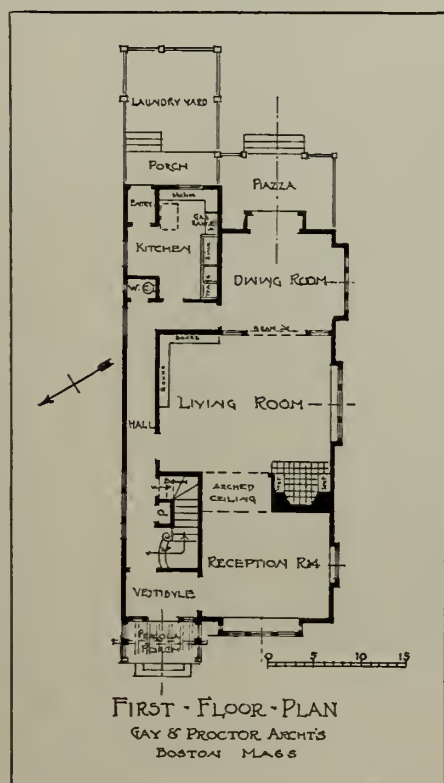
fied display—all serve to give the house an aspect which will be permanently pleasing.

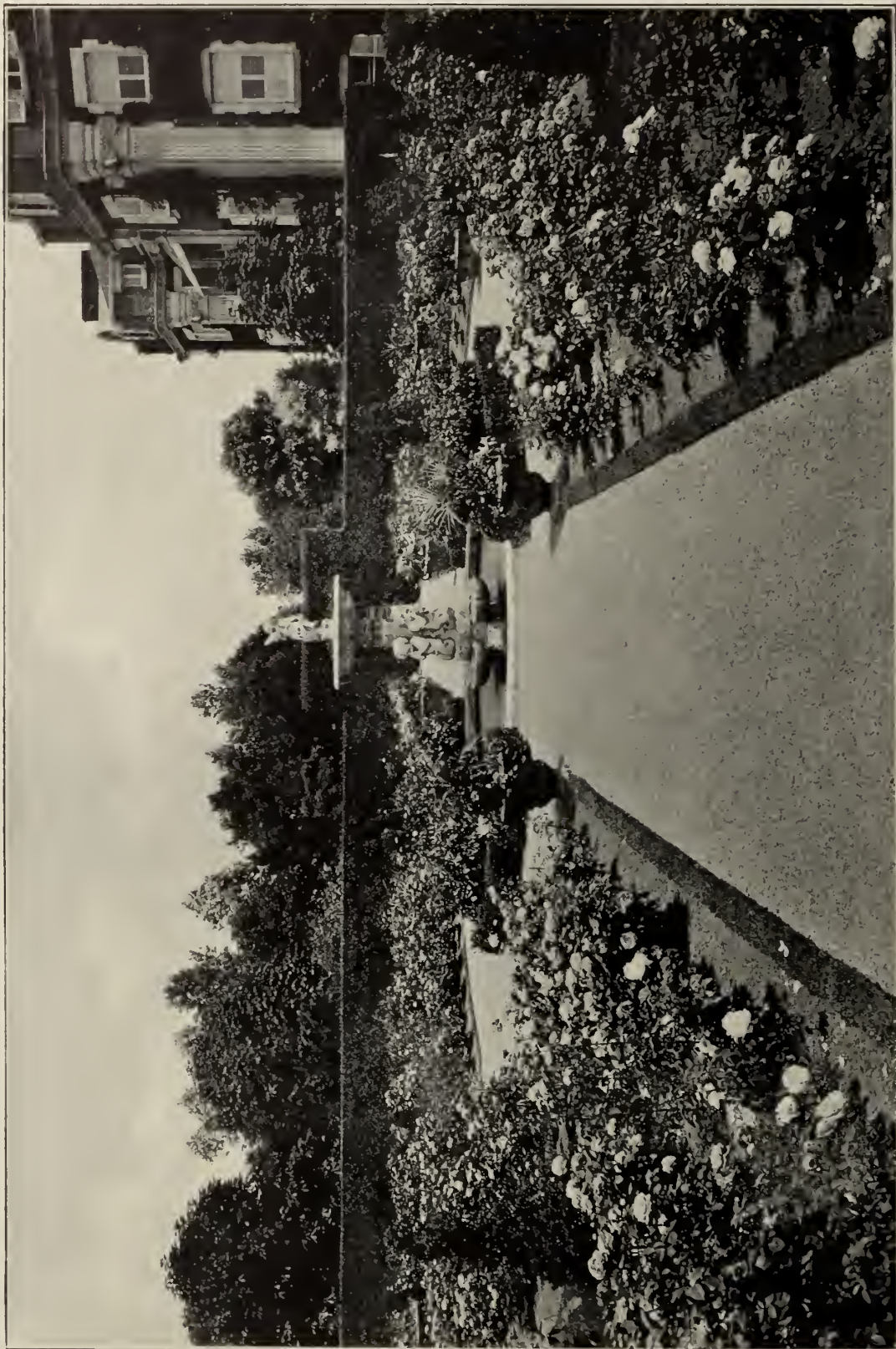
The underpinning is of random-faced stone work, with wide, vigorous pointing. The superstructure is of frame, which bears cement plaster

In this arch drapery may be placed, or the smaller openings enlivened with flowers.

In order to save unnecessary footsteps and consequent fatigue, a pantry is dispensed with, and all the service work is centered in the kitchen,

the plan of which is worthy of study. The cooking is done entirely by gas. Dishes and pans are placed within easy reach on wall shelves and cupboards. All cooking odors are removed by vent flues, while light and air are admitted through two side windows and a skylight overhead. The reception room is finished in white paint and mahogany trimmings, the living-room in cypress stained a weathered brown. While the house is small and its plan compact, the wide openings leading from room to room on the main floor produce an effect of spaciousness, which is a characteristic as obvious as that convenience of arrangement and cheerful aspect.





CELEBRATED FORMAL GARDENS OF AMERICA—II
ON THE C. OLIVER ISELIN ESTATE AT NEW ROCHELLE, NEW YORK
(See page 45)



CELEBRATED FORMAL GARDENS OF AMERICA—II
A VIEW FROM THE TERRACE OF THE HOUSE ON THE C. OLIVER ISELIN ESTATE

The Regulation of Heat Indoors

BY DAVID H. CUYLER

ALL have experienced the discomfort of an overheated or a chilly apartment during the season when artificial heat is required. Many of the ills we are heir to may be traced to such a cause, for the exposure of the body to a temperature of eighty or more degrees is conducive to a physical condition that is little able to cope with the danger met by passing out of the front door or opening a near-by window.

It is safe to say that there is no room in which artificial heating is attempted that does not become unbearable at times unless provided with a device of some kind to regulate the temperature. This has been proved in thousands of homes, and such a device has been recognized by the best engineers of this country and Europe to be no longer a luxury but a necessity. To those of my readers who contemplate building, I would say, sacrifice anything in order to have the best in your heating arrangements. First, have that part of your home perfect, and your rugs, pictures and fine frescoes and woodwork will be the more enjoyable, for where is the man who can muster deserved enthusiasm for a Corot or Millet in a temperature of either fifty-five degrees, or eighty or more?

Picture your home or office a whole season through without a variation of two degrees night or day. If the temperature of the home can be thus maintained, the flight to a southern or foreign resort in search of an equable climate would be avoided.

These comfortable conditions at home are insured by a system of heat regulation that is automatic. It requires no thought on the part of the occupant of the house unless he wishes to make a change in his choice of temperature, which may be done by the simple movement of a small key.

The contrast of two conditions is a most forceful argument in favor of such an appliance. For example, imagine a living-room when the outdoor temperature is at twenty degrees above zero. Naturally this would demand the use of all the heating arrangements and the total sealing of the room by closing windows and in many cases closing doors, with the result that the indoor temperature

soon rises to seventy-five degrees or more. The resulting discomfort soon leads one to open a window, and open it goes. When wishing to cool off a room, it is strange that most of us, instead of turning off the heat supply, rush to open a window or door, thereby increasing the coal consumption by unheedingly trying to heat the great outdoors. When a window is opened, the surplus heat goes out long before the cooler air has a chance to enter.

With regulation of the heating system there are no windows opened, for the temperature is right at all times and no thought is given to the opening.

Although heat regulation was attempted sixty or more years ago, few are aware of the progress that has been made in perfecting it. A really practical apparatus was not produced until Mr. Warren S. Johnson perfected his device in 1884. At present, I believe there are five or six different devices on the market. Those most widely used consist of thermostats placed in the rooms, which operate, by means of compressed air, dampers placed in the heat flues, or diaphragm valves on the radiator. This compressed air is simply obtained from a small hydraulic air compressor installed in the basement. One of the pipes at its base is attached to the water supply of the building and another to a near-by waste pipe. The pipe at the top of the compressor is connected to a steel storage tank.

It has been found by practice that the best results are obtained with a steady air pressure of fifteen pounds to the square inch throughout the whole system, so to insure this, and at the same time make the operation of the compressor entirely automatic, a small reducing valve is placed in the water supply pipe near the compressor connection and adjusted to reduce the water pressure to a set point, so that when the air pressure throughout the system reaches fifteen pounds, it will equalize with the water pressure, and thus the cylinders of the compressor will be held dormant between two equal forces. From the air storage tank small pipes are installed, concealed in the walls and leading to the thermostats in the

various rooms to be regulated, and from the thermostats to the various valve or damper motors.

The thermostat is, of course, the vital part of the whole system, and in this, as in all other mechanical apparatus of any worth, simplicity has been the keynote. It consists of a sensitive strip of metal shaped like the letter U, and held rigid at one end in an adjustable carriage. The metallic strip controls a small valve which opens and closes the supply of air pressure to the diaphragm motors on the radiator valves or on the damper regulators. A cover of more or less ornamental design is provided, on the front of which is a thermometer for registering the resulting temperature. This cover is of metal and is generally finished to match the other hardware, or it may be finished to match the walls of the rooms or the woodwork. The thermostat is small and more ornamental than otherwise, but if inconspicuousness is desirable it may be made so by various means.

From this mere outline a rough idea of automatic heat regulation may be gleaned. The system is in use to-day in many homes, offices, hotels, hospitals, schools and public buildings of all kinds, from a small town library to the Capitol of the United States. It is also employed in special places where an unvarying temperature is desirable, such as conservatories, palm houses, swimming tanks, Turkish baths, kilns for drying

tobacco, leather and lumber, japanning ovens and sterilizers of all kinds.

The trend of the times is toward reform of many kinds. Periodicals devote page after page to exposure of crime and graft. Certain it seems that reform is needed to overcome the hygienic evils existing in most of our homes. A temperature above or below the normal for health and comfort is a serious fault in any household. It is injurious to its occupants, and especially to growing children. It were well if temperature regulation be demanded in all confined habitations of mankind, for therein lies the one and greatest means we have of overcoming more than half the disease that preys upon our race.

We have been ever ready to award the wreath of honor to men who have discovered cures for some of our ailments. How much more deserving of plaudits is he who has made it his life's work to give us a happy means of fortifying ourselves against the primal causes of most of these same ailments. That he has succeeded in this effort is of greater moment to mankind to-day than any of us can realize, but the day is coming when this success will be appreciated. In the meantime, the hygienic conditions and lasting comfort in the home and in the place of toil can be made perfect and sure by the use of these automatic devices. The benefits reaped in health, vigor and happiness will tenfold repay for the momentary outlay they involve.

The Formal Garden on the Iselin Estate

(See Illustrations, pages 42 and 43)

THIS is a comparatively new garden made upon level and exposed land near the shore of Long Island Sound. It is a garden enclosed, the boundary being made by a hedge, successfully grown, in that it is compact and lends itself to the shearing, which gives a style and finish to the scene it encloses.

In the center of the garden is an exquisitely carved fountain of rich design, standing in a pool from which four paths radiate in a manner to form four equal quadrangles. Each of these is outlined, first by a border of turf, and then by a continuous bed of roses. When the photographs were made, these plants were still young, as were also the cannas occupying circular beds in the

center of each grass parterre. Small pyramidal evergreens accentuate the corners of the grass area, and terra cotta jars are located in well-considered places. At so young a stage, the garden lacks shade to present a contrast with its light; but when the trees outside the boundary hedge grow larger they will make sufficient background for the bright-colored, sun-bathed spot in front of them.

Where the walks terminate at the hedge, stone seats have been placed, and from these a prospect of the flowers is enjoyed. Other views of the garden are obtained from the windows of the house. Situated as this is, at one corner of the garden a vertical tier of these windows look into the parterres without interruption.



EASY EMBROIDERY.—Initials all ready to sew on her household linen, and, when so attached, splendidly simulating the best work of her own hands, are a convenience for the woman who has little time for embroidery, though she may not have lost the sentiment for it.

THE MOST ELABORATE BED LINEN which a person may sleep in is that of the Swedish housewife, who not only embroiders her monogram on pillow slip and sheet, but borders each with a wide frill of lace she has herself crocheted. Pure and fragrant linen is the fabric of her household store.

FOR A LIVING-ROOM TABLE-CLOTH, better than any made affair with fringes, is the drummer's sample of imported tapestry. The finest fabric and exquisite color design may be obtained for \$1.25 a yard and upwards, and it adds a note of rich harmony to a room of the simplest appointments. The autumn is the best time for securing a good selection from the retail

upholsterer or the department store. The attractive variety will include goods from Scotland, England and France, all of which countries have secret processes which they use in dyeing, and which give to these products a beauty and superiority of texture which we have never been able to rival in our domestic tapestries.

WINDOWS THE KEYNOTE OF A ROOM.—There is nothing, perhaps, which so effects the beauty and cheerfulness of a room as the window. Happily grouped, windows form a spot where light and sunshine play upon work or pastime and suffice for all other shortcomings the room may have. Architects have only begun to exert their ingenuity upon windows, and that is why all the beautiful fabrics made for window decoration must be so often arranged in the old conventional ways. A few unusual window schemes, however, are shown by the illustrations.

WINDOWS WITHIN THE THICKNESS OF THE WALL in city houses provide what is virtually a bay-window when seen from the interior, and without any projection outside. Often such a projection would be undesirable if the blank wall of another house stood nearby. If the outlook is poor, ribbed glass in leaded design will appear satisfactory within. For the main curtains, hanging in heavy folds to the floor, velours, mohair, antique plush or the lighter Navajo goods might be used, all but the last requiring to be lined; and the effect of this corner of the room could be much improved by small curtains in two heights hung directly next the sash. Many materials might be so used, from inexpensive Swiss and plain scrim to muslin in fillet pattern at \$1.25 a yard, and fagoted scrim at \$1.50; also grenadine and China silk at \$1.00, and oriental lace at \$2.00



BAY WINDOWS WITHIN THE THICKNESS OF THE WALL
Sketch by W. Eyre



WINDOW NICHE WITH CHAIRS
Designed by E. J. Margold

alcove. A tea table or flower stand may set between. This should not, however, be high enough to prevent the talk that flows between persons sitting in the chairs. The alcove, in being raised above the floor of the room, is an eminence for views indoors and out.

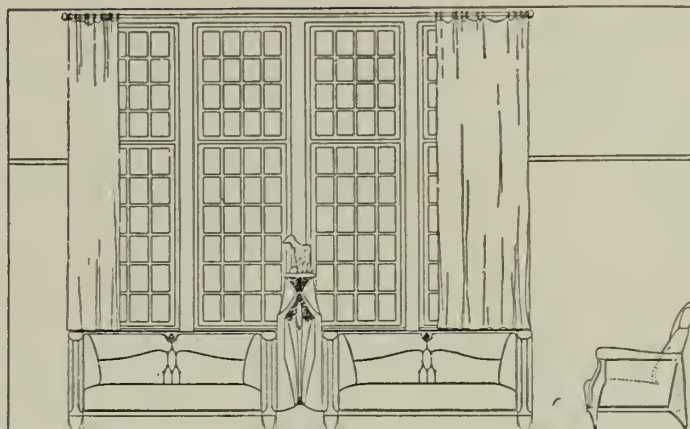
THE BUILT-IN WINDOW SEAT, which is more comfortably upholstered than window seats usually are, is shown in another illustration. At each end of the divan are attractive



A WRITING ALCOVE
Chester H. Kirk, Architect

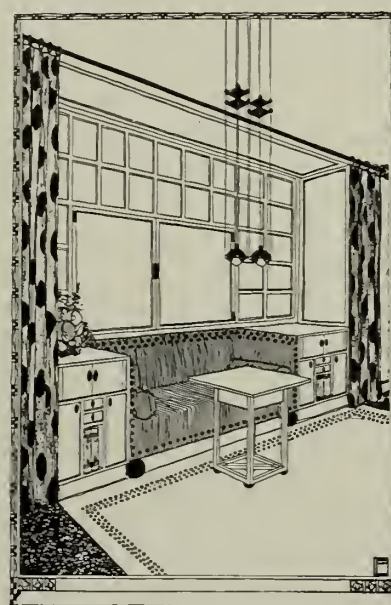
a yard, fifty inches wide.

WINDOWS AND FURNITURE COMBINED.—What may be accomplished by this means to obtain an effective center of interest for a room is suggested by several other illustrations. In one, upholstered chairs are built into a window



GROUPING OF WINDOWS AND FURNITURE
Designed by Paul Haustein

cupboards for books, sewing materials and sundry cherished objects too numerous to mention. Flowers may be placed on the tops of the cupboards. The divan may be arranged to slide forward into the room for purposes of cleaning. This window grouping is also comprised within a niche. It may



WINDOW NICHE WITH DIVAN
AND CUPBOARDS
Designed by E. J. Margold

be separated from the room by a fabric of light, transparent body, on which are bold designs, such as madras (75 cents to \$1.25 a yard), the net fabrics, as "fillet net," and "imitation fillet lace," which comes thirty inches wide at 75 cents a yard. India silks could also be used. Other materials worth considering are the French panel effects, tambours and grenadines, which come in narrow widths and have ornamental edges. These range from twenty-five cents to seventy cents a yard.

A WRITING ALCOVE is often more convenient than a writing-room, especially if the alcove is easily accessible from several rooms, if it is, indeed, a part of them. A desk where one may conveniently dash off a note or jot down memoranda is shown in the illustration of a portion of a house at Ventnor, N. J.



LEANING SKYSCRAPERS

The St. Louis artisan who declared that there are very few skyscrapers in his city that are not out of plumb might truly have made the statement cover all other places where skyscrapers abound. The man was an elevator builder. In setting the "slides" a long plumb-line is hung from the top floor to ascertain whether the shaft be vertical and the sides parallel. By this means his observation was readily made. One of the older skyscrapers of St. Louis proved to be out of plumb twenty inches. Visions of the Leaning Tower of Pisa and other wayward campaniles come to mind, and the question of safety arises. But in skyscrapers, as in all things else, there is safety in numbers, and where many are grouped together, as in one block, the total area of the base is greatly increased and stability insured. Each skyscraper on Manhattan might lean two feet, yet nothing could move the whole aggregation. As long as the elevators run smoothly the leaning propensities of the skyscraper may safely be ignored.

TREES IN CITIES

"Some day," remarks Mr. Vacherot, chief gardener of the city of Paris, who is now visiting New York, "this young and great country will understand what trees mean to its future. He had before him our miles and miles of treeless streets of the present, and the parched patches our cities flatter by the name of parks. He reflected, doubtless, upon the care given trees in France, and which we have not yet learned to give them. There, a tree is not only planted, but is assiduously attended afterward. As soon as a new street is opened, in go the trees. Each is kept nurtured, pruned and watered. Each is numbered and receives as much attention as a pet specimen upon a private lawn. No wonder that William Robinson, the English garden authority, so long ago as 1867, pronounced the great abundance of healthy trees to be the noblest

feature of Parisian gardening.

Here in our own country, the custom is too often to leave a tree to itself after it is planted. Wind, drought, insects and the vandalism of street idlers work havoc with the result of many a tree-planting appropriation. A love of trees is not inculcated, nor is a responsibility to protect them laid upon the authorities. When trees are valued they will be protected by all. Appreciation of them leads to respect for them, care for them and their thriving abundantly among us. Then we shall realize that tree culture does not end with planting the tree. It begins there.

RECLAIMING THE EVERGLADES.

Agriculturists in Florida hail with enthusiasm the perfecting of the plans for draining the swamp area, regarded as waste, and comprising a large part of their prolific state. This wild region of mystery and romance, possessed of a wonderful flora and fauna still unharmed, we are to imagine transformed into rice fields, sugar and orange plantations. Some day the sun will rise upon dry land thus created if, in the meantime, the enterprise be deemed worthy of an outlay of serious proportions. Whether it will pay will be asked, what the return, and how soon, from the money expended? There are "everglades" nearly as fertile as those of Florida, and much nearer centers of civilization, which it would seem more profitable to reclaim. Then there are waste lands on the very borders of overcrowded cities, that if improved would receive an immediate influx of industrial establishments and of toilers who, fleeing from city congestion, would purchase the land for homes. As long as the New Jersey meadows opposite New York City, the Back Bay region of Boston and the flats surrounding Western cities remain vacant, capital, whether in the hands of individuals or the Government, had better leave the wilderness of Ponce de Leon remain a wilderness somewhat longer.

INDOORS AND OUT

THE
HOMEBUILDERS
MAGAZINE



NOVEMBER



ROGERS AND WISE CO.-PUBLISHERS
NEW YORK BOSTON CHICAGO

The advertisement features a decorative border and a central star-like pattern. The border is composed of a repeating interlocking geometric motif in black and white. The central pattern is a large, multi-pointed star with a red center and black points, surrounded by smaller red and black geometric shapes.

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Indoors and Out

THE HOMEBUILDERS' MAGAZINE

ROGERS AND WISE COMPANY

PUBLISHERS 85 WATER STREET BOSTON

NEW YORK OFFICE, 4007 METROPOLITAN BLDG., 1 MADISON AVE.

Copyright, 1905, Rogers and Wise Co.
Entered at the Boston, Mass., Post Office as Second-Class
Mail Matter, October 14, 1905.

SUBSCRIPTION PRICE, \$3.00 A YEAR IN ADVANCE. FOREIGN SUBSCRIPTION, \$4.00
TO CANADA, \$3.50 A YEAR SINGLE COPIES, 25 CENTS

For Sale by All Newsdealers in the United States and Canada and by The American News Co. and its Branches

Contents for November

VOL. V

1907

No. 2

THE ENTRANCE FEATURE OF A TWO-STORY COUNTRY HOUSE	Frontispiece
AN EMPIRE-BUILDER'S HOME By Henry C. Shelly	49
	(Illustrated)
HAVE YOUR COLORS HARMONIZE IN ADJOINING ROOMS By J. R. B.	55
HOW THE ARCHITECT WORKS By Burton Kline	56
A FAMOUS OLD COLONIAL HOSTELRY By Josephine R. Bates	60
	(Illustrated)
A TWO-STORY COUNTRY HOUSE	66
	(Illustrated)
A CITY HOUSE WITH UNIQUE PLAN By H. M. K.	71
	(Illustrated)
OLD-FASHIONED "FOUR-POSTER" BEDS By Corinne S. Horton	75
	(Illustrated)
HOW TO WEAVE HAND-WOVEN RUGS By M. T. Priestman	82
	(Illustrated)
A CHARMING SMALL HOUSE	87
	(Illustrated)
HOW TO LAY OUT AND BUILD THE DRIVEWAY By Richard Schermerhorn, Jr.	89
	(Illustrated)
BEAUTY INDOORS	92





THE ENTRANCE FEATURE OF A TWO-STORY COUNTRY HOUSE
AT HADLYME, ON THE CONNECTICUT RIVER

The Property of Frederick Culver, Esq.

(See page 66)

Charles A. Platt, Architect

Indoors and Out

THE HOMEBUILDERS' MAGAZINE

VOL. V

NOVEMBER, 1907

NO. 2



“Groote Schuur” from Table Mountain

An Empire-BUILDER's Home

DE GROOTE SCHUUR, THE RESIDENCE OF THE LATE CECIL RHODES,
NEAR CAPE TOWN, SOUTH AFRICA

BY HENRY C. SHELLEY

With Illustrations from Photographs taken by the Author

MORE than a quarter of a century ago a young man was talking with a friend. On the table before them lay a map of South Africa. “That,” he said, as he swept his hand over the continent from the Zambesi to the Cape, “that is my dream; all English.”

Cecil Rhodes was the speaker; Cecil Rhodes, who, notwithstanding the controversies which have raged around his name, is destined to a sure place among the empire-builders of the British race. Only within the past month or two the voice of a poet has made eloquent appeal for recognition of the debt due to that planner of great schemes:

For see! For hear! How race is trampling race
Where'er the white man's tempered breezes blow!
Hear England saying, “He won a breathing space
For English lungs, where skies of azure glow.”
Hear Freedom saying, “He gave me a brooding place,
Where, 'neath the flag I love, my limbs shall grow.”

From the ambition of his early manhood Cecil Rhodes never turned aside. To think in continents seemed natural to him; and just as natural to think in centuries instead of months and years. He planned his life broadly, his aims were colossal, he was of the true race of empire-builders.

Yet — and how vital the lesson! — this man felt the need of a home. For all his far-reaching



GROOTE SCHUUR FROM THE GARDENS



THE BACK STEP

thoughts; for all the toils of intrigue to which he gave himself in the pursuit of his ideals; for all the restless spirit which led him far and wide amid the vast distances of South Africa, there were hours when the strain was too great, when he wanted a refuge for rest,—a home. "Home," said Ruskin, "home is the place of Peace; the shelter, not only from all injury, but from all terror, doubt and division."

When I saw Cecil Rhodes in Kimberley, the Boer siege of that town had been raised but a few hours. For months that restless spirit had been cooped up in the diamond city, and at that moment, when the Boer lines were but now broken, his first thought was to seek once more the home he had built for himself in far-away Rondebosch.

Nor was that surprising. Difficult, indeed, would it be to imagine any situation more romantic than that occupied by "Groote Schuur" at Rondebosch, on the lower slopes of Table Mountain, some five miles from Cape Town. The approach to the house is along a lofty avenue of magnificent pines, and when the main entrance eventually opens into view there is at first a slight feeling of disappointment that this should have been the home of a man whose name is suggestive of monumental things. The overtowering trees behind the house and the massive mountain in the farther background seem to have a dwarfing effect. But when Groote Schuur is surveyed from the



THE FRONT STOEP

rear, all this is forgotten. The stalwart pines give a delightful setting to the building, the Dutch-terraced garden weaves around it a garland of color, and the dreamy distance of the Cape Flats removes the picture into the realm of the imagination.

Those who were most intimately acquainted with Cecil Rhodes always affirmed that his home at Groote Schuur was the only proof he ever gave that there was a sentimental side to his nature. The illustration was twofold. On a surface view, the house, in its planning and its naming, proved its

owner possessed strong Dutch sympathies, a quality that Mr. Kruger would hardly have credited him with. But consider for a moment. The name of the house, meaning "Great Barn," is Dutch to begin with, and all its most interesting associations are connected with the early settlers from Holland. For some years before Mr. Rhodes bought the place, it had been known as "The Grange," but immediately on its coming into his possession, he revived the old Dutch name. And inside the house and outside the house a Dutch atmosphere is all prevailing. Teak, the wood the Dutch introduced into the colony in its early days, is used everywhere, and its preservation is insured by constant oiling, a practice which contributed to the disastrous nature of the fire which caused such havoc with the building, several years before Mr. Rhodes died.

Then the house is full of such articles as a



THE BILLIARD ROOM



THE DINING-ROOM

wealthy Dutchman loves to gather around him; rare old chests, fine vases and massive carved seats for the stoep, and here and there an ancient cannon which has done duty in some memorable battle of the past. Whatever other qualities of the Dutch did not appeal to the master of Groote Schuur, he was deeply in love with their quaint and quiet home life.

Some fifteen hundred acres around the house and away up the mountain side, form the grounds of Groote Schuur, and they were transformed by Cecil Rhodes into a vast open air zoölogical garden. Such wild animals of the South African fauna as are not dangerous roam at will about the wide spaces of the inclosures, but for beasts of prey there are strong cages scattered here and there. These grounds are as free as air to all who like to come, and even Groote Schuur itself is not walled off in the least from the public road.

Nay, while Mr. Rhodes was still alive, his house itself was as open to the casual caller as to its owner. During my sojourn in South Africa I paid several visits to Groote Schuur, and on one occasion I found that it had been taken possession of by several aristocrats from England, who were more bent on keeping the place to themselves than its owner ever was. Indeed, it was not an unusual thing for Cecil Rhodes, on returning home, to insist that the disposition of people at his own dining-table should be left undisturbed, while he himself would take any vacant corner, as though the latest arrival at a hotel table.

While the outdoor coign of vantage most enjoyed by the master of Groote Schuur was the beautiful stoep at the back of the house, which opens up a lovely prospect of the terraced garden and the grounds and Table Mountain in the distance, the apartment indoors in which he most unbent himself to his guests was his billiard-room. In the simple bookcases at its farther end were kept his famous type-written translations of the classics, and a rare collection of books on South African history. Around the walls were disposed the flags and other relics, recalling the countless enterprises "up country," in which he had taken part. Among the most recent acquisitions in the apartment, when I saw it last, were two "Long Cecil" shells, charges

which had been made for the "Long Cecil" gun, the famous piece of ordnance designed in Kimberley during the siege, by an American engineer. Near by, too, was the first one hundred-pound shell fired by the Boers into Kimberley. But more interesting still, and more peaceful in its suggestions, was the little flag—it hangs against the bookcases—which Mr. Rhodes had himself designed for his Cape to Cairo route. It was a blend of St. George's Cross and the Star and Crescent.

Notwithstanding all his love for Groote Schuur, Cecil Rhodes looked upon its sturdy walls as so much plastic clay to be molded this way and that, as he thought fit. Most men possessing such a property would feel their ideas as to its internal economy limited by the structure as it came into their hands. Not so Cecil Rhodes; his thoughts penetrated stone walls, no matter what their thickness. Thus, on one of my visits I found some workmen laboriously hewing their way through a massive stone wall in one of the smaller halls. Inquiry elicited the fact that Cecil Rhodes had picked up somewhere a set of old oak shelves, and had given orders that they were to be placed in a certain corner of that hall. He was told that they could not stand there, as they projected a foot into the doorway. "Then cut a new door somewhere else," was his reply.

In harmonious keeping with the Dutch style of its architecture, the dominant note throughout Groote Schuur is that of simplicity. Neither in furnishing nor adornment are there any of those painful extravagances so often perpetrated by the unrefined millionaire. Color schemes are quiet in tone; lines are lines and not distortions; and even the mural decorations are fit but few. Apart from the splendid piece of tapestry on the south wall of the dining-room, the only picture in that apartment is a portrait of the mother of Cecil Rhodes.

How seemly that is, and how it circles the mind back on the home sentiment which, after all, was the supreme passion in this man for whose planning continents were too straightened. So had he ordered his life that no wife of his own, no mother of his children, should watch by the hearth of Groote Schuur. But in her place hangs this semblance of his own mother, and home for Cecil Rhodes was where she was. And thus to him



THE HALL OF GROOTE SCHUUR



THE STAIR LANDING AT THE SECOND FLOOR

Groote Schuur was a "sacred place, a vestal temple, a temple of the hearth watched over by

THE clauses of Cecil Rhodes's will relating to South Africa made provision, first, for the creation, maintenance and adornment in the Matoppo Hills, in Rhodesia, — where Mr. Rhodes desired that his own remains should be laid, — of a burial ground to be set apart for the bodies of men and women who should have rendered eminent services to South Africa; secondly, for the scientific cultivation of estates in Rhodesia, in the manner most calculated to afford instruction to the inhabitants of that region, in regard to such matters as irrigation, experi-

Household Gods, before whose faces none may come but those whom they can receive with love."

mental farming, forestry, market and other gardening, and fruit farming, the establishment and maintenance of an agricultural college being also specified; and thirdly, for the dedication of the testator's residence, De Groote Schuur (with money for keeping it up), and neighboring property under Table Mountain, to the use of the Prime Minister for the time being of a federated South Africa. Pending the realization of federation, the grounds may be used as a public park. — *The Annual Register, 1902.*

Have your Colors harmonize in Adjoining Rooms

"HOW charming!" I exclaimed, as I crossed the threshold, though I couldn't, for a moment, tell why. In a flash, however, the reason dawned upon me — "It's because of the color scheme!" My hostess had not forgotten that the hall is not the only room that first strikes the eye, and had furnished the adjoining rooms in colors that blended with it, thus bringing into harmony a group of rooms and producing the much desired effect of spaciousness. She had remembered to *carry out a harmonious color scheme in furnishing adjoining rooms.*

From the front door the visitor looks through into the living-room on the left, with its brown wainscoting and old-gold paper; and then turning to the right, the dining-room opens, finished in mahogany and papered in green. The reader may think that the subdued colors are overdone, but the rooms, except the hall, are lighted from windows on three sides, and are further relieved by light hard wood floors and delicately tinted ceilings.

In furnishing, monotony was avoided and the

desired harmony produced by not adhering too conscientiously to the prevailing color in each room. Nor was the value of contrast overlooked in finishing the dull red hall in ivory white woodwork, which toned well with the natural colored pongee window curtains and dark brown of the window frames and banister rail.

Just a word in regard to the curtains, a never-ending source of interest. While they added to the unity of the rooms, as they were all on the same general pattern, made of silk, and hanging straight to the sill, the colors of each set were varied to harmonize or contrast with the different rooms. They were old gold in the living-room, though of a slightly different shade from the paper, and somehow found an answering note in the handsome Persian rug, with its rich blue ground and its pattern in wood color and greens. But by this time you have doubtless had enough color talk, so we cannot do better than linger by the fire for tea, and try to guess how the rainbow was so skillfully lost.

J. R. B.



A New House of Wood at Dedham, Mass.
The Residence of Joseph Morrill, Esq.

Chapman & Frazer, Architects

How the Architect Works

A SANCTUM VIEW OF THE MAN WHO DESIGNS THE HOUSE AND WATCHES OVER IT UNTIL COMPLETED

By BURTON KLINE

A MAN having an ulcerated tooth calls in a dentist, is treated, howls, and is relieved. Having an ulcerated throat, he summons a doctor, squirms under his swabs, and is healed. Having shot his neighbor's barking dog, he invites his lawyer to dinner, and the excellence of his soup or wine saves him from impending damages or doom. Having nakedness to cover, dignity and a reputation for sanity to maintain, and the conflicting tastes of a wife and three daughters to satisfy, this same man consults a high-class tailor, is measured, fitted, covered, with scarcely a sound from himself beyond a gasp at the cut of his bill. The relief that he has required of these ministers to his convenience or vanity the afflicted man accepts with nothing but meek and uncritical gratitude. But the conduct of this same meek man when he ordered of an architect the plans for the house in which he humbly receives his dentist, doctor, lawyer — that makes a different and a longer story.

It makes a longer story because the great curse of this age is education. The technical knowledge that it has taken to make the doctor or lawyer is of course as difficult, as long and as distasteful of attainment as it ever was. But the smattering of this and of that, that is imparted to the modern infant in his puling years, the cheap travel that comes to him later on, the range of information that is opened to his inquiring and stimulated manhood mind, qualifies him to quarrel with any painting, though it be a work of genius; it enables him to differ on the spot from philosophers who have buried a lifetime in the upbuilding of a system; and above all, it certainly fits him to make life difficult for the architect whom he employs to design him his house. We all have "taste" in these days; we all know something, or are obliged to pretend that we do, not to be outdone by inflated neighbors. That is why the architect, though he may have spent twelve long years in the study of his craft, and ransacked every corner of the globe to correct his tastes and master his art, may have a dozen admirable plans thrown back on his hands, with the simple ultimatum from his client, "It's

not what I want," or, "It's not in good taste." The least annoyance that he may hope for from a patron is that the taste or the effectiveness of some dozen details, instead of the value of his whole plan, may be questioned. Have a look at an architect at his work and see for yourselves these ills peculiar to his trade.

A man — a lawyer, we will say — has defended the widows and orphans and has won hundred-thousand-dollar fees, sufficient to his building a country place that shall quite surpass the long-envied one of the great banker Jones. He hies him to an architect — hies him alone, do you think? By no means. His wife and daughters go along. And perhaps the intellectual and judicial weight of the party is strengthened by the company of his mother-in-law.

These good people are lifted to the fifth floor of a very good office building — for they have thought to employ not the meanest man of the craft. They open their eyes when they are ushered into a suite of an astonishing number of rooms. A great number of clerks at desks and drawing boards seem feverishly busy. There may be thirty, or even seventy of them, and even more. And the visitors probably wonder what other business is being done in this particular suite.

Through this hive of buzzing clerks the callers are shown to the private office of the architect himself, in the rear. They may be seated in heavy oak chairs of classic design. They look about in an oblong room, paneled to the ceiling, with a fireplace on one side, book cases with leaded glass doors, and the walls hung with water colors, photographs or perhaps perspectives of the architect's pet achievements. The architect will have his desk; but the center of operations is a long, heavy table in the middle of the room.

Upon this table, at various points along its periphery, these half dozen persons lean elbows and lay their heads together in understanding. Twenty minutes of talk and the architect knows where they wish to build, has formed in his mind's eye a hazy picture of the particular loca-

tion they have chosen, and may have started as it occurred to him that here was just the place to utilize that fine idea of a country-place that had flashed into his mind the other day on the train.

He seizes a scrap of paper — it may be no bigger than a visiting-card — and makes a few passes with his pencil. The visiting-card is a favorite drawing-board, by the way, with students of the Beaux Arts. Held on the knee in train or tram, there has been born upon it more than one ambitious scheme of buildings whose construction called for millions of francs. At home with such minutiae, the architect here employed lays off a scrappy, rude floor plan in miniature — his clients watching his idea as it grows.

"South exposure, of course?" he queries as he sketches. And there is plotted off a dining-room, drawing-room, hall, afternoon room, and others that belong to mansions built on such a scale of amplitude. They are all assembled with a skill come of long experience with clients and of intimate acquaintance with accepted notions of elegance and comfort.

"The prevailing wind is southwest, of course?" And the clients, watching, half fascinated, note that the dining-room, though placed to share in the sunlight, has been stationed at that end of the string of rooms which would oftenest be in the lea of the wind, so to say. The rapid pencil draws on, and at an angle permissive, it is plain to see, of picturesque gables and other details of exterior design, the servants' end of the house is laid off — in the lea of the dining-room — so that odors of cookery, laundering and other vulgar processes inseparable from housekeeping, may be blown away from the family quarters and left to the janissary nostrils of the servants.

The amount of money to be expended has naturally to be discussed. The daughters will have valuable ideas to impart, bearing on problems of decoration. One will be particular as to the placing and dimensions of her sitting-room. Madame wants the hall made a special size, to accommodate some pet piece of furniture and set it off to its best advantage. The *belle mère* will hand out general good advice and may drift off the subject and consume ten minutes in irrelevant praise of some château that she once beheld in the south of France. It doesn't forward the business in hand, but it conveys some sense of the lady's

vast travels — which is what she most wished to have remarked; and she has to be listened to, for most likely she is furnishing some of the money. Finally, the head of this interesting household may have a few meek notions of comfort and convenience to be embodied in this expression of his wealth and standing in the community. The architect listens to all this; clears his mind on doubtful points in these people's desires; and at last, when they all seem to understand themselves and each other, he is left to himself to take the next step in the execution of these, his latest orders.

Taking as a basis this thumb-nail sketch he has made, he prepares a larger but still diminutive floor plan. In this the dimensions of the rooms and their relation to each other will become definite, and perhaps final. Finality fixes itself upon the whole scheme of the house. The architect is assuring himself what he wants the house to be.

He and his head man go over this small plan, and with the head man it is left, to be copied on a slightly larger scale, with the addition of any details that might have been neglected in the first draught carefully adjusted and the whole plan refined to a pitch beyond which it is not practicable to go. This map of the first floor of the prospective house, as submitted by the head clerk to his chief, — and often the chief will laughingly confess that the head clerk is a better architect than his chief, — this map of his is subject to the supervision of the builders of the house on their next call. In the accuracy of its drawing it might serve the mason or carpenter who shall lay the foundation and string the joist. The great lawyer, his wife and three daughters and their maternal grandma, are delighted with this bald outline of their future home. From its simple lines, simple yet fertile in suggestion, they see rise in imagination their home precisely as they have dreamed it shall be. The mellowing touches that Time shall give its appearance, the laborious processes of its building, seem already finished. The mere formality of the completion of the plans, the picture of the façade, the side elevation, and all that, they think, can be pushed through at any time when the architect has the leisure for it.

"Well!" they gasp as they rise to leave. "Now we can go ahead with the building, can't

we!" And they are overjoyed at the prospect. They are overjoyed, until they are quite abashed and disappointed to be told by the architect that not a stone can be laid toward the building till the remaining plans are completed. They have forgotten that for every window and door measurements will be required, and sketches for every bit of stairway, paneling, carving or other decoration.

"How long will these annoyances take?" is their natural inquiry.

And the architect, being a prosperous and busy architect, will probably say "Six weeks," in a calm, even, offhand tone of voice. Very even, his tone; but it elevates the eyebrows of his visitors in their wonder at what a lazy mortal he is. That it should take him six weeks to sketch off a few curlicues and elevations and things! For the clients of an architect can never reconcile themselves to the fate of being but one of a possible dozen patrons whom the poor man happens to be serving at one and the same time.

Once again the head man is called into conference with his chief, and the task of drawing up the plans for the remainder of the house is committed to him. The architect himself may be no great hand at conjuring up stunning exteriors, or elegant inside decoration. He may not be able to draw at all. His is the part of suggesting, of criticising the product of his employees.

To the head man, then, the scheme for this particular house is entrusted—to him and the thirty or the seventy others in the establishment. The architect has imparted to him the ideas that the owners wish embodied, and he and the thirty set to work. The electrical expert is early summoned, to lay his plans for the lighting system, the cooking and elevator service that may be required—because his wiring must be plotted before there can be laid out the partitions in which it shall be concealed. So it is with the clerk whose business it is to plan the ventilation, and so with the plumbing. After that appropriate men stir their brains over the façade, over particular rooms that are marked out for especial embellishment. Their work, as it progresses, is carried from time to time to the chief for inspection and revision. Each chap—he may be freshly graduated from Harvard or the Beaux Arts—is alive

with notions of his own that he wants to put in force; he is ambitious to rise and establish himself as an architect; he is an artist and has visions of beauty that he burns to see realized in brick and stone; or at all events he wants or has to earn the twenty or forty dollars a week that he is being paid; and so, week by week, the plans grow to beauty and completion. The building of the house may now at last proceed, and the architect seems to have earned the paltry five per cent that he very frankly needs to float his expensive plant and eke out his never lordly income. His work seems done.

His work and troubles have but begun! The masons set to work on the foundations, but hardly are they well under way when the price of their materials is sent suddenly skyward by some fluctuation in the market; the cost of the house is to be shockingly increased; the nice calculations of the architect have been upset; and he has to face a sadly disturbed, or it may be a thunderously indignant patron. It's all the fault of the poor architect, of course, this man thinks.

"That's always the way with you fellows!" he may shout in his heat. He may grow loud and alarm the neighbors. His face may grow purple with passion. "You wheedle a man into this sort of thing, and then stick him and bleed him to your heart's content!" And he storms out of the office with an extremely poor opinion of these wretched fellows who do nothing but draw pretty pictures that cost five times as much as they're figured to cost, when you come to hrow them together into a house.

If it is not the price of stone that has gone up, it is the cost of something else,—and however flimsy and fluttering may be the market prices of building materials, it is a recognized peculiarity they have that they never flutter down. And if it is not the price of materials that flutters then it is the price or the temper of labor. Of course the great lawyer and his family connections, having dignified the architect with their order,—and by that, as they think, guaranteeing the poor starveling his living for another year,—expect that in return for this philanthropy he shall personally linger all day about their building house and see that it is properly constructed, that every brick that goes into it is sound and well-laid, that every workman hammers his every

nail in an absolute perpendicular and thoroughly earns his princely thirty or eighty dollars a day, as the case may be. But the architect, having sundry other matters to look after in the earning of his own pittance, is obliged to delegate this inspection to an employee. He may have in his service a dozen trained and diplomatic architectural Metternichs whose sole business it is to see that his houses are soundly built, that his patrons are kept daily assured of the excellence of their future abode, and that all the labor unions represented in the building force are daily soothed and raised in pay.

Be this inspector the most keen-eyed and conscientious of men, the owners of the new house are suspicious of him. He is not the architect himself, and in the nature of things cannot possibly know what he is about, or know anyway how they want their house constructed. And so a maiden aunt of the family undertakes this work of inspection for herself. She indeed is conscientious; she will let nothing escape her! Daily she saunters about the tentative young walls that are rising, and pokes the mortar with her umbrella to see that it is of the stiffness consistent with sound brick work. Every box of screws that is opened, every load of lumber that is hauled to the ground, must pass her critical gaze. She may report supposed rottenness of material or falseness of workmanship that will send the owner flying to the architect with a protest. Or her troublesome interference may post the contractor to that worried man with the announcement that he will throw up the whole job unless relieved of that maiden aunt's pestiferous meddling.

In the owner's eagerness to have his place finished, extra men may be employed — carpenters, roofers, plumbers. One of these being not in the best of standing with his union, the entire force on the building threaten to quit unless the objectionable helper is forthwith removed.

When the house is nearly completed come notions to the family that they wanted something different. A room here, or there, is not of the size or has not the position in the house that they desired. Or some scheme of decoration is flatly pronounced impossible. It may be the paneling and carvings in the dining-room. They are strictly in key as the architect's staff designed

them, but the family in their omniscience know better and want something entirely different. New plans must be drawn at once. Or, perhaps the architect's office becomes the storm center of two factions in the family, one clamoring to have certain details — a gable, a chimney — left as they are, the other in violent advocacy of a change, and each appealing to the architect in support of their cause.

Finally the house is finished. It may be something radically different from the fair and beauteous dream that the poor architect had in mind when it was ordered or begun. In this great lawyer he may have seen a large minded man who would permit him to put into brick and stone a new school of domestic architecture, some pet new principle that should alter the whole trend of American building and uplift it and give it a character of its own. This house should inaugurate a new movement, should stamp the occupant of it as a man of broad views and high courage, should stamp the architect of it as a man of genius and place his name beside that of Richardson. People in time to come should speak of early and late Jonesian, as they speak of early and late Colonial. And so the plans for this revolutionary house were drawn, and the house was built — but not, not the house of the poor architect's dreams! Early and late Jonesian have yet to wait for their embodiment in brick and stone. Here again is another pride of his establishment that has been tinkered with, and altered, and "improved" to suit alien, and not too correctly tutored, tastes. For not one house in a dozen, or a hundred, that the architect designs, is built with fidelity to the first plans, and without worry and heart-burn to the designer. If it is only to have a door swung in another than the manner indicated on the plans, the owner will have some or other alteration made.

The last step in the architect's part of the transaction is to send in his meek, modest bill. Five per cent of the cost of the house is his rate, with extra charge for planning elaborate decorations, and still another one for troublesome alterations in his original drawings. And the long string of his objections and criticisms the owner will probably end with a last and very energetic criticism of the proportions and taste of his bill.

(Concluded on page 65)

A Famous Old Colonial Hostelry

"THE WAYSIDE INN," AT SUDBURY, MASS., IMMORTALIZED BY LONGFELLOW AND PRESERVED WITH ARTISTIC CARE, STILL DISPENSES HOSPITALITY TO THE TRAVELLER BY AUTOMOBILE AS IT DID IN THE DAYS OF THE STAGE COACH

BY JOSEPHINE R. BATES

One Autumn night, in Sudbury town,
Across the meadows bare and brown,
The windows of the wayside inn
Gleamed red with fire-light through the leaves
Of woodbine, hanging from the eaves
Their crimson curtains rent and thin.

Round this old-fashioned, quaint abode
Deep silence reigned, save when a gust
Went rushing down the country road,
And skeletons of leaves, and dust,
A moment quickened by its breath,
Shuddered and danced their dance of death,
And through the ancient oak's o'erhead
Mysterious voices moaned and fled.

Prelude to Tales of a Wayside Inn—Longfellow.

THERE is no doubt that the old-fashioned country inn is coming back to its original place of importance in the community, though the main reason for its existence has been decidedly changed. It is no longer the mere railroad station such as our ancestors knew it when journeys were made by post horses, but it has become the objective point for pleasure excursions of all descriptions. The increased interest in country life and the new romance which motor cars have given to travel in late years are largely responsible for this revival of the inn. Among the most attractive of these is the Wayside Inn, situated in the beautiful rolling country at Sudbury, Massachusetts.

Perhaps even New England tourists may not realize how accessible this is, and will be interested to know that the historic tavern, immortalized by Longfellow in his "Tales of a Wayside Inn," is not more than twenty-five miles from "The Hub," on the main road to Northampton. Here they will find ample hospitality, and much that

will interest them in the historic and literary associations of the place. The house itself furnishes so excellent an illustration of the Colonial home that the visitor feels as though he were living a hundred years ago, and is actually disappointed when a sudden "Honk, honk!" reminds him that automobiles have replaced the picturesque stage coach.

If the traveler is not fortunate enough to possess the up-to-date conveyance, his less speedy approach will give him a better opportunity to notice the attractive effect of the long driveway, whose overhanging trees frame the house at the end of the vista. So cleverly has this been arranged that on arriving at the house one is surprised to find that the highroad, whose existence was forgotten some time ago, is not a hundred yards from the front door. Here the small square porch, with benches on either side and rose vines twining around the pillars, forms a comfortable nook where the traveler may rest a moment before inspecting the interior. If he has an eye for the quaint and old



THE RED HORSE PRANCING ON HIS SIGN

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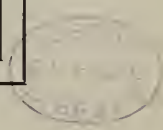
THE APPROACH TO THE WAYSIDE INN

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THE FRONT OF THE HOUSE

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TWO VIEWS OF THE PARLOR AT THE WAYSIDE INN



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Furnished with Relics of the Gatherings held by Longfellow and his Friends, the Daniel Webster Desk and Chairs from Admiral Farragut's Flagship

fashioned, he will notice the weather-beaten sign-board to the left, where

“Half effaced by rain and shine
The Red Horse prances on his sign.”

It was by this name, “The Red Horse Inn,” that the tavern was kept in olden times by Squire How, whose forefathers built it as a mansion house, a typical English country seat. But when the fortunes of the family failed, it was turned into an inn, and at the death of the last survivor was sold, and the furniture scattered; so that it was no small undertaking for the present proprietor to refit the place when he took possession of it. That he has accomplished his task successfully no one who visits the inn will deny, for the house is filled with a collection of antiques which would be a credit to any museum, and delight the heart of the antiquarian. Not only are all the specimens in keeping with the Colonial architecture of the house, but they have been arranged with a view to displaying to the best advantage their relative and individual merits. No matter how diverse the tastes of the guests, each is sure to find something that appeals to his particular hobby, whether it be for pictures, bric-a-brac, or old furniture.

The interior decorator will be interested in the way the different rooms have been arranged and finished. For harmony and continuity are manifest in the prevalence of certain architectural features of the Colonial period, such as the low ceilings, the heavy board floors, and the small, diamond-paned windows, and also in the use of furniture of the same date. But monotony is avoided, because each room is different in its purpose and development.

The first one you are shown is the old bar-room, quite a curiosity-shop in itself, with its wall covered with prints and engravings. Here an odd collection of lanterns, there a heavily studded safe, and the usual old clock in the corner. The spirit of the room is distinctly patriotic, recalling Revolutionary times in the warlike scenes in the pictures, the swords, flint-locks and powder-horns, and last but not least, the gallant Hessian soldiers on the andirons.

In the parlor are a number of interesting relics of the gatherings which were held by Longfellow and his friends. These consist mainly of letters from various members of the party, and

are interesting because of the glimpses they give into the lives of their writers. Another famous American is remembered in an interesting way, for, in the corner of the same room, is a beautiful old desk at which tradition tells us Daniel Webster wrote some of his famous speeches. Though not of Colonial date, two chairs from Admiral Farragut's flagship may be mentioned as objects worthy of our notice. Before going on to the ball-room, one must not forget to glance at the How coat-of-arms hanging over the mantelpiece, of all the things in the room, the one that is perhaps most associated with the inn itself.

The ball-room is a unique affair on the second floor. Here there is naturally little furniture, except a piano, and wooden seats which run around the entire wall. As the tops of these can be lifted so that wraps may be put inside, there was little need for cloak rooms when the country folk assembled for their balls and parties. The floor, however, scarcely suggests dancing, so heavy are the boards, until we recall that minuets and reels were the order of the day.

Below the ball-room is the dining-room used for guests of the inn. It is so large that a row of pillars down the middle of the room is necessary to support the low-studded ceiling. An interesting feature of the room is the wide fireplace with a kettle swinging on the crane, and the Dutch oven to the right, furnishing a fine illustration of the culinary methods of these times. Doubtless my readers all know that it was the custom to build an enormous fire below the oven. When it died down the bricks were so hot that the thrifty housewife could bake enough cakes and pies to last a week or so. One is led to conclude that formerly this must have been the kitchen. The original dining-room is a much smaller apartment opening out of the bar-room, and it is now used for private parties. This is one of the most artistic rooms in the house, finished in harmonious shades of yellow and green and furnished in handsome mahogany. Here, again, is a large fireplace with its crane, and above the mantel a fine pair of antlers. Opposite the door, as one enters, the wall is relieved by a bay window, prettily draped with curtains, whose flowered pattern tones with the prevailing colors of the room.



THE ORIGINAL DINING-ROOM

Copyright, 1898, E. R. Lemon

Treated in Yellow and Green and furnished with Fine Old Mahogany



THE TAPROOM

Copyright, 1898, E. R. Lemon

Containing Old Furniture and Arms of the Revolutionary Period

Though the walls of the corridors are almost entirely covered with prints, engravings and photographs of historic people and scenes, one occasionally gets a glimpse of the attractive paper beneath, where sportsmen, in pink coats, and keen-scented hounds are continually chasing the elusive hare. This lends a touch of sporting life which is most appropriate, since the inn is a favorite resort of the Myopia and Norfolk Hunt Clubs.

Before concluding this tour of investigation, you will be shown some of the bedrooms. Of these the most interesting are the large Longfellow room in the corner over the parlor, and that occupied by General Lafayette. Both are furnished in heavy mahogany, dating back many years. An odd thing about the Lafayette room is the way in which a corner has been cut off, made into a little room within the main room, to be used for a valet, who would have the honor of sleeping in the quaintest of canopy-topped bedsteads.

In a general account of the inn it would scarcely be possible to give adequate space to a description of all the details which make up the complete and interesting whole. The paintings

and engravings deserve a chapter to themselves. Again, one could easily while away many hours in examining the collections of old china and pewter ware, furniture and bric-a-brac. A striking feature is the appropriateness of the arrangement of these collections. The house is not overcrowded. Everything has its own place to which it alone could belong, and is merely a part in a perfect, organic whole. People do not want to feel the burden of sight-seeing thrust upon them, and it is a clever device to appeal to their tastes unconsciously, so that they are interested in spite of themselves. In establishments of this kind there should always be some points of interest beyond the mere providing of the comforts and necessities of life, and it is here that the innkeeper will find his great opportunity. Since the leisure class of tourists is continually increasing, the old country taverns may be restored, and new ones started with a definite practical end in view—to waylay, refresh and interest the passing traveler. For such an enterprise no better model can be taken than the Wayside Inn at Sudbury.

HOW THE ARCHITECT WORKS — Concluded

In one form or another this is the experience of the architect with his every new undertaking. There are variations of course. Sometimes he is commissioned to build by a man who manifests really superior intelligence by applauding and acquiescing in every one of the architect's ideas. After the first grueling shock of surprise at this, the poor artist pours the very essence of his being into that particular work. He knows that he will

live and labor many a day before his life is glorified by another such experience. So the architect plies his trade. In the triune capacity of artist, business man and diplomat, he earns his modest income, expresses his artist soul in thoughts of stone front and gambrel gable, and may even stamp his character upon the community about him, — all in the pursuit of a difficult, a little understood, but yet a happy occupation.



A House overlooking the Huntingdon Valley

Residence of Robert Sewall, Esq., at Rydal, Penna.

C. C. Zantzinger and C. L. Borie, Jr., Architects



THE PERGOLA CONNECTING THE PORCHES

Mr. Frederick Culver's House at Hadlyme, Connecticut

A Two-Story Country House

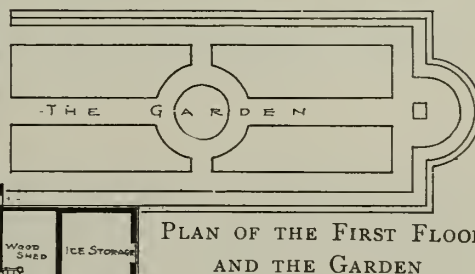
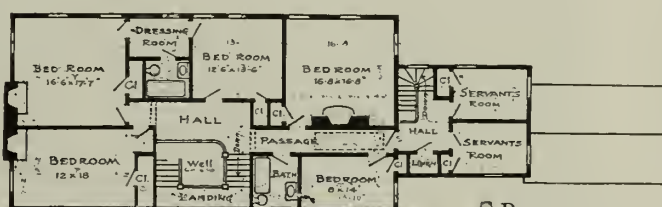
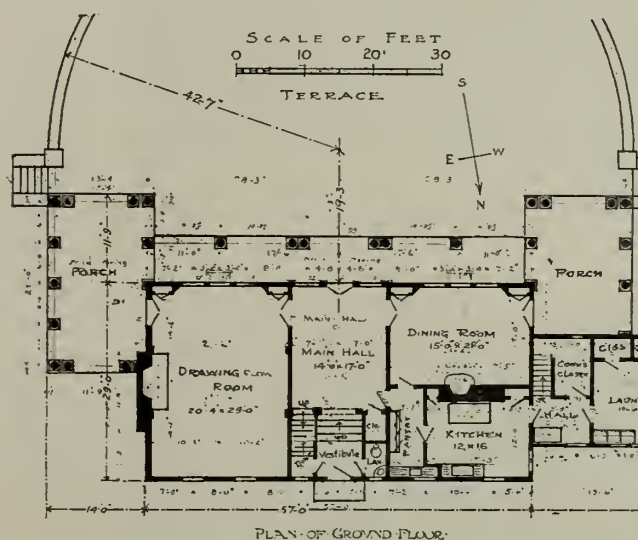
AT HADLYME, ON THE CONNECTICUT RIVER

The Property of Frederick Culver, Esq.

Charles A. Platt, Architect

THE dignity, good proportion and solid repose of the New England country house has won for it a renown which is everywhere recognized. The low white structure of wood, with outstretching wings containing the kitchens, wood-shed and ice-house, and all shaded by protecting elms or pines, has been pictured by artists, described by poets, and made by novelists the scene of well-loved tales. Small wonder is it that this esteemed type of house is not to be permitted to pass away. Rather do those who build to-day in New England seek to preserve the charm of these old prototypes of the soil, whether the

not the struggle for existence pursued by our forefathers. The low roof slanted at an angle, followed by the Italians in their buildings, bestows a grace of outline in place of the gaunt severity seen in many of the old American houses. The Palladian entrance feature accords with Colonial tradition. The service wing, with its wide arches opening to the woodshed, picturesquely serves a practical end behind an arbor screened by a bank of shrubbery. Upon the



south is an arbor, so Italian in detail as to merit being called a "pergola," which connects two porches and overlooks a level semi-circular lawn, upheld by retaining walls above the original naturally sloping ground.

house they rear is a wholly new one or an old homestead which they wish to enlarge.

This entirely new house at Hadlyme departs from the New England model as a modern home must depart from that of a hundred years ago, for dwellings to-day serve genial and plenteous living,



THE ENTRANCE HALL
Reached by a Few Steps from the Vestibule

Thus the well-formed house has been well set. That it is pleasantly surrounded is realized on seeing the garden. This extends outward from one of the porches and has, as a protection upon one side, the service wing prolonged by a wall. This wing is almost



THE FRONT OF THE HOUSE
Reached by a Circling Entrance Drive



THE SOUTH SIDE OF THE HOUSE
With its East and West Porches, overlooks the Terrace



THE DINING-ROOM

With Antique Furniture, and the Casement Window opening upon the Porch



THE DRAWING-ROOM

Treated with Breadth and Simplicity



THE GARDEN AS SEEN FROM A BEDROOM WINDOW

covered with vines, and the lush growth of flowers fills the garden beds to overflowing. Grass is allowed to grow between the flat stone slabs of random shape that form the walks, and this adds greatly to the familiar and delightfully natural effect of a garden which is not over-ornamented nor over-tended.

The plan of the house is extremely simple. From the entrance vestibule a few steps rise to the main hall. On the left is the drawing-room, with its porch reached by a French casement window. On the right is the dining-room, also with a porch reached in the same manner, and where meals might be served. Whatever the time of day, at least one of these two porches will be shaded. The pantry and kitchen complete the rectangle of the main house, while a roomy hall, cook's closet and laundry comprise a service wing which is two stories high and, in being provided with its own stairway, becomes

independent of the rooms occupied by the family. The portion comprising the woodshed and ice-house is but one story high and is of advantage to the design of the house in prolonging its base.

The three large bedrooms face the south, and in so doing overlook the terrace while leaving a view of the garden to be enjoyed from but one window in addition to the windows of a servant's room. A portion of the ceiling of the second floor (shown by dotted lines on the plan) is arranged to swing down and its upper surface is formed into steps by which a storage loft above is reached.

The absence of a third story is responsible for the general form of the house, which is stamped with grace when seen from whatever point of view. And in country houses, where space for lateral expansion is at command, this attribute of grace is a dominating [one as it concerns the homes of culture and refinement.



A City House with Unique Plan

WITH THE RECEPTION HALL ON THE SAME LEVEL AS THE "CELLAR" THE ROOMS ABOVE ARE INSURED UNDISTURBED PRIVACY

THE defects which exist in the interior arrangement of many speculative city houses has prompted a study of the subject with a view to planning upon new and original lines.

Many persons of culture and refinement are compelled to live in such houses, and the privacy of the family and their guests deserves the greatest consideration. In developing narrow lots, architects have failed, not only to utilize the entire width of the property, but to satisfactorily devise a scheme whereby the dining-room would not be a thoroughfare from the front to the rear of the house. Any reduction of the width for vestibule and hall requires the rooms to be too narrow for satisfactory furnishing, and this method also wastes for mere passageway a large proportion of the front and most valuable part of the house. In order to avoid making a thoroughfare of the dining-room, a narrow, dark passageway along the party wall has been tried, but this makes the dining-room too narrow for serving around a table of ordinary size.

These defects are immediately avoided by simply building the house with the ground floor (it would be called the cellar if it were below the grade) but one step above the pavement. This is probably not a new idea, but it has not been applied to houses of moderate size. Although the advantages to be obtained are here illustrated in the case of a single detached house, they are as easy of ac-

complishment in a semi-detached house, and, with slight modification, to houses built in a solid row.

By this method all the principal rooms are made the full width of the house, and the passageway from the kitchen to the front door is through the ground floor under the dining-room. Many housekeepers will say at once that this is not practical, as it necessitates too much running up and down stairs. To obviate this, a speaking tube is installed from the front entrance to the kitchen with a branch to the second-story hall. Many useless steps are saved by thus disposing of innumerable needless calls, the bane of every city housekeeper.

As both entrances are practically level with the grade, the baby coach, children's wagons, etc., can be taken in and out with the greatest ease. (In the majority of small city houses the baby coach is kept in the parlor.)

The reception hall being floored with tile, the housewife is never perturbed by persons entering with muddy shoes, wet clothing or dripping umbrella. Strangers and casual callers are here received without annoyance to the rest of the family or even seeing the private apartments. The guests are able to remove their wraps without turning a dainty bedroom into a cloak-room. Various tradesmen and the gas and electric companies' inspectors, needing to reach the cellar, can do so without passing through the house.

The laundry is



THE HOUSE FROM THE STREET
Showing Main Entrance at the Ground Floor Level with Loggia above



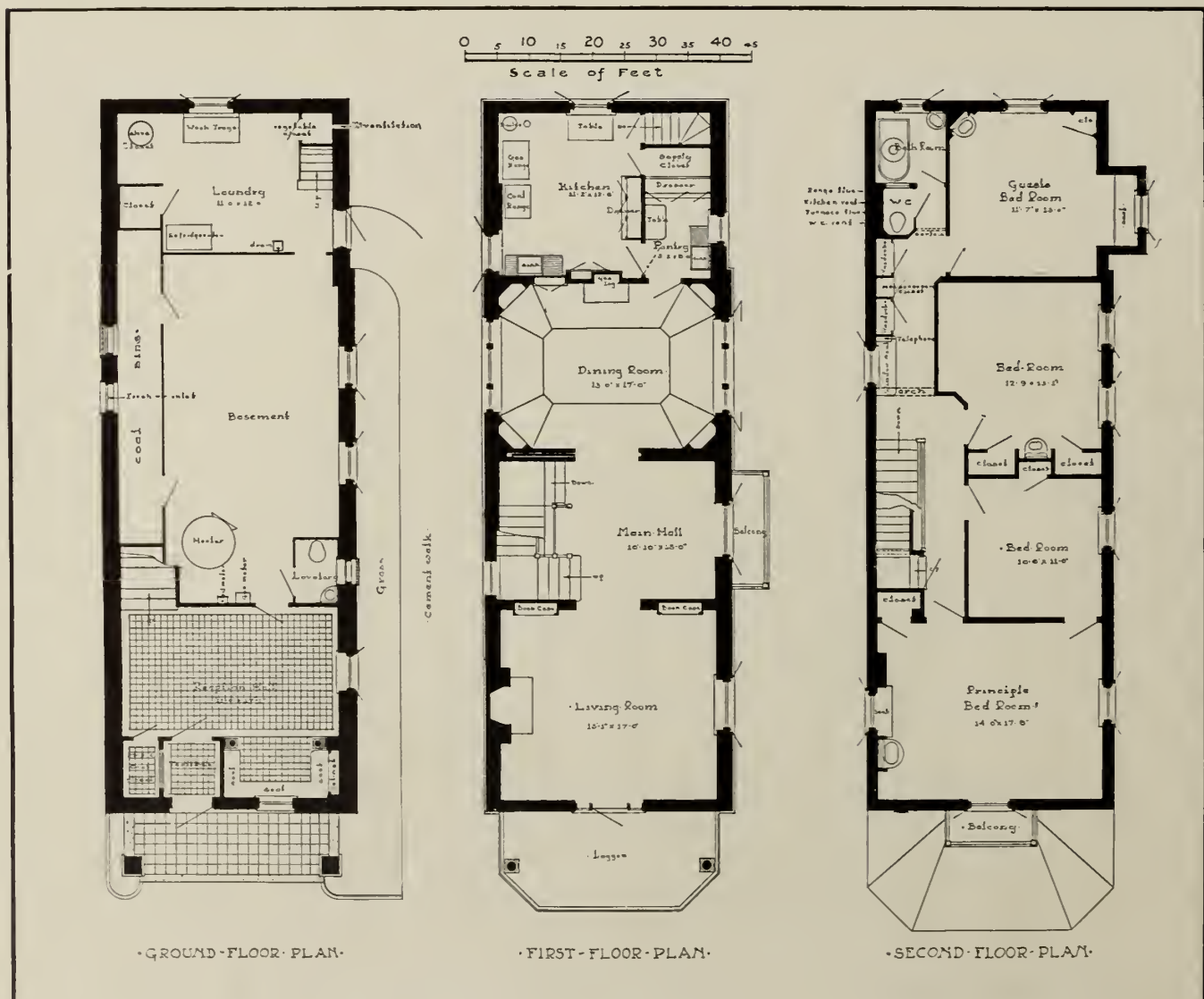
THE MAIN HALL

*At One Floor above the Street**Louis C. Hickman, Architect*

located in the rear, with the floor level with the grade for the convenient admittance of supplies. The well lighted and ventilated cellar becomes the greatest convenience for drying clothes on rainy days.

As the average cellar is dark and poorly ventilated, it can contain nothing but heater, coal bins, an accumulation of rubbish and much empty space that is useless. By the plan shown herewith, the front of the house, ordinarily the cellar, is developed as a reception hall and vestibule reached by a main entrance door, with ample coat, closet and toilet rooms adjacent.

The platform at the main entrance is raised slightly above the pavement or grade, thereby avoiding the many ex-



terior steps, which are often dangerous in the winter, and avoiding all woodwork near the ground, in which location it constantly disintegrates. The separation of the front door from the party line, occurring as it does below the porch or loggia, enables the tenants and guests to come and go without the usual annoyance of a neighbor's gaze from an adjoining porch.

The loggia is reached through the living-room. Its elevation affords privacy, and its isolation from the public permits its being completely screened and furnished in a simple but comfortable manner. In a semi-detached house or house in a row, a lattice screen should be pro-



THE LIVING-ROOM

With its Pleasant Vista and Built-in Bookcases

vided at the party line. The vista from the loggia to the dining-room shows the symmetry of the apartments. There is absolutely no waste

space. The treatment of the stair hall with its balcony is a central feature of the house. In the dining-room, the doors to the pantry, the china closet and mantel have been treated in a manner to give special character to this room. At the same time the monotony of a rectangular room is avoided by making the room octagonal, and by slanting the ceiling a short distance from the wall line. The space in the angles can be used for recessed china cabinets.

It has been demonstrated that in a house where but one servant is required, and where a



THE DINING-ROOM

Octagonal in Shape and with Slanted Ceiling

kitchen is not a thoroughfare, but is used only for its specific purpose, a small room requiring the fewest steps is the best. Much study has been given this portion of the house. There must always be two doors between the kitchen and dining-room, with a double swinging door between the kitchen and pantry. There must be a ventilating flue leading both from the range and from a point near the ceiling to remove odors from cooking. These essentials are provided.

By the use of an electric lock with a button under the pantry window and an approved door check and spring on the rear entrance, the servant can admit any one without leaving her work. The pantry window just above enables her to see who is there, and after they leave, the spring closes the door, it locks, and no one is needlessly annoyed.

Each bedroom has been provided with hot and cold water and a closet overhead for toilet articles and medicines. The water-closet has purposely been placed in a separate apartment. A permanent ventilating flue is provided for the water-closet with register at the seat level, which keeps the air of the enclosure constantly pure. Ventilation introduced at the eaves of the house provides a constant current of air over the attic, keeping this story at practically the same temperature as the one below.

BOSS TWEED'S HOUSE ON FIFTH AVENUE,—No. 511, at the southeast corner of Forty-third Street,—now stands isolated among business premises. At the end of another year it is likely to be acquired by a



A VIEW OF THE PRINCIPAL BEDROOM
Showing Recessed Toilet Arrangements with Cupboard above

The stairway to the second floor and the hall are very liberal in width, while the rear hall is utilized for wardrobes to store the season's clothing, curtains, blankets, etc. Here is also a small housekeeper's closet, and one for guests' clothing.

No difficulty has ever been found in running this house with one servant (in addition to the washerwoman) and the comforts and facilities supplied always commanded the best assistance.

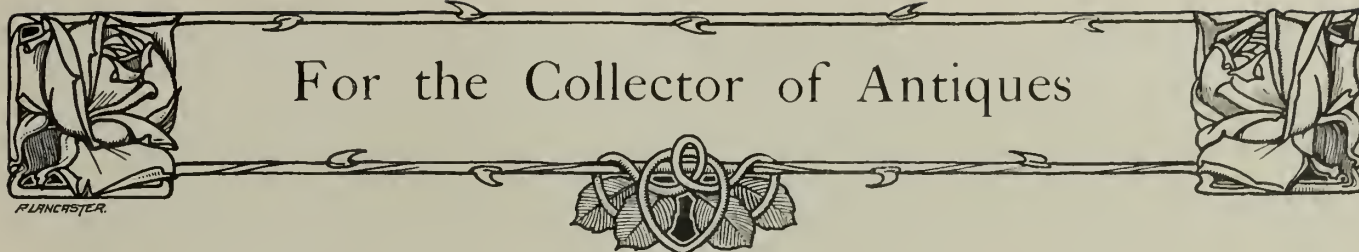
As the day is not far distant when the

public will demand houses open on at least three sides, this type of house cannot fail to meet all the complex considerations and requirements of the intelligent housekeeper. It measures 18 feet wide from center to center of walls and is 64 feet deep, including the loggia. The simple treatment of the exterior demonstrates the uselessness of inappropriate, poorly executed and usually vulgar ornament on the average speculative house, simply to attract a prospective purchaser.

Where houses are built in pairs there is no reason why the same materials should not be used on all sides, thus making them appear sightly from whatever view. When our builders erect houses that are attractive on the rear, the neglected and uninteresting back yards will disappear, together with the wretched outlook which has always been an objectionable feature of city quarters.

H. M. K.

London syndicate who will tear it down to make way for a five-million-dollar hotel. Possibly this is to be the hotel on the English plan, which it is rumored is soon to be added to New York's sumptuous hostelryes.



Old-Fashioned "Four-Poster" Beds

AN ANALYSIS OF THE EMPIRE AND GEORGIAN STYLES, ILLUSTRATED WITH EXAMPLES
FOUND IN OLD HOMESTEADS OF THE SOUTH

BY CORINNE S. HORTON

GENERALLY speaking, the "four-poster" found in America—and this refers to beds that have grown old on the soil, not to lately imported antiques—are either of Georgian or Empire periods. Only once have I heard of a notable bed of earlier date having been found here. This—a bed of black oak—was discovered at one of the old Anglo-American plantations of the Ashley River region near Charleston, S. C. It was of the Stuart period, being heavily carved in grotesque figures with a heraldic device in bold relief ornamenting the headboard. The columns were carved in the twisted pattern and the tester was ornamented with the heads of animals. It was sold to a New York dealer for five hundred dollars, who, it is safe to assume, doubled his money many times on the investment.

Carved furniture of the Stuart and Tudor periods was enormously expensive and quite beyond the purse of the average American colonist. The early Georgian bedsteads

found in America were, as a rule, extremely simple and inexpensive with neatly turned posts and plain headpieces, costing from two to three pounds each and often even less.

The earliest style of mahogany bed of the Georgian period was the "tent" bed, with its low posts and curving superstructure, dating about 1750. Then came the lightly fluted posts of Hepplewhite, with all their richly yet delicately

carved ornamentation. Chippendale's beds were practically unknown to Colonial America, though his chairs and other pieces occasionally made their way across the water. His beds, being objects of really marvellous perfection and enrichment, were, it may be assumed, beyond the American purse. We have found, from time to time in this country, examples of the Adam and Hepplewhite styles of beds, the first with their pleasing classicism, the latter with something of the same tendency, Hepplewhite having been a student of the former. His work was individualized by



FIG. I. A SATISFACTORY EXAMPLE OF THE EMPIRE STYLE

The comparatively slender, yet roughly foliated posts suggest the later Sheraton designs, although the headboard is distinctly Empire. The decorations, while floral in character, reveal the peculiar sphinx-like scrollings introduced by Napoleon's cabinet-makers after his return from Egypt.



FIGS. II AND III. "FOUR-POSTERS" IN THE EMPIRE STYLE

When it was at its height, 1815. The carving of the posts and the treatment of the headboards may be said to mark the perfection of the style. These beds are owned by Mrs. H. S. Atkinson, Atlanta.

lightly fluted columns and headpieces. We have also found here, dating from the years 1780-1790, delicately yet richly carved designs of Shearer and Sheraton. All of these beds with their different variations belong to the Georgian period, and are, strictly speaking, our Colonial styles.

But all the Georgian beds in America are merely a handful in comparison with the number of beds of the Empire styles to be found here. The great bulk of mahogany now enriching the homes of Americans is of this period. The reason is obvious to any who consider the situation. By 1810 (Napoleon being then the head of the French Government) Empire styles were being admired and desired the world over; for they were then the latest novelty. Americans, having recovered from the ravages of war, were entering upon a season of prosperity. They were building new homes and furnishing them. What more natural, Empire styles being the fashion, that they should adopt them, especially in view of the admirable *rapprochement* that existed between Americans and the French on account of LaFayette's assistance during the Revolution. And Empire furniture poured into the newly founded republic by every ship,

to be distributed from one end of the Union to the other; most of it, however, lodging permanently in New York, Charleston, New Orleans, and the older towns of New England and Virginia.

The introduction of Empire styles brought many changes in furniture building both in proportion and ornamentation; and no article was more radically affected than the four-post bedstead.

Under the Georgian cabinet-makers these beds had been comparatively low to the floor, and their four standards had been delicate, even attenuated. Under the Empire, beds were made so high as to require the use of steps, and this height was further accentuated by the addition of mattresses; the posts became larger and larger, until, at the end of the period just prior to the introduction of black walnut, they acquired the absurd and most unattractive proportions illustrated in Figure IX.

During the Georgian period carving, though executed with the highest degree of perfection, was totally different in character from that popularized under the Empire. It was more flat in effect. The acanthus leaf, it is true, prevailed as the most universal decoration both

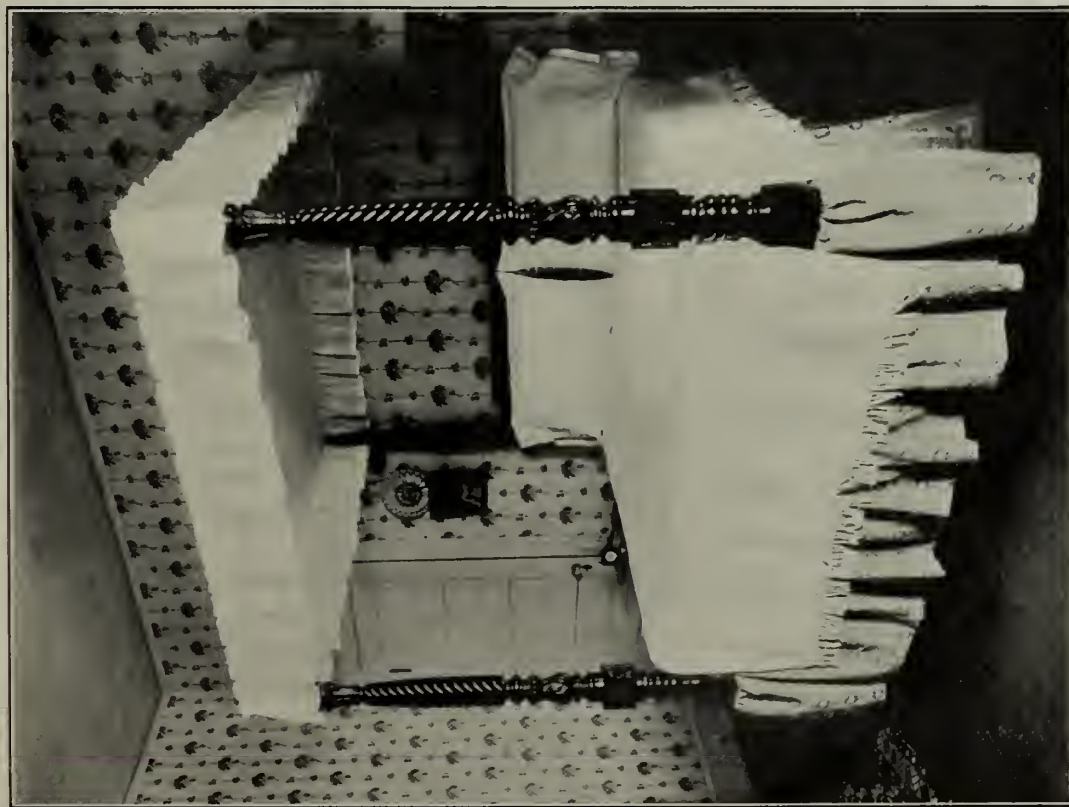


FIG. IV. AN ADMIRABLE "FOUR-POSTER" OF ENGLISH MAKE
The parts of which are excellently designed and carved. Date 1820

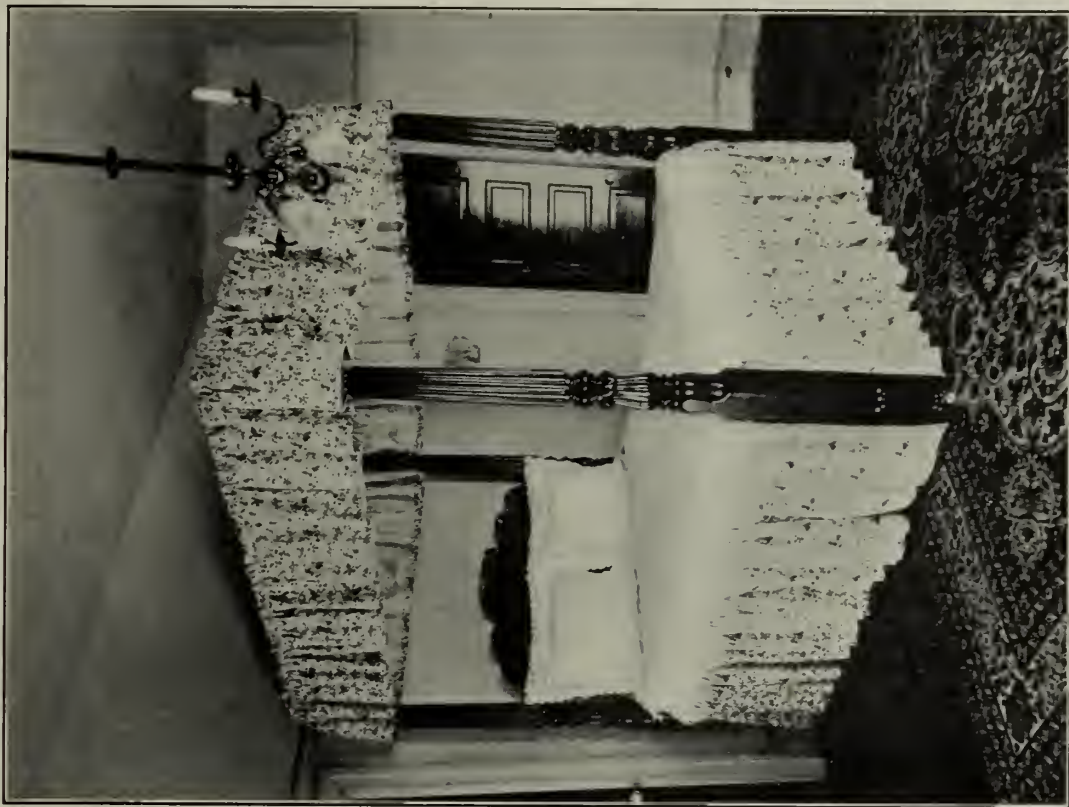


FIG. V. A "FOUR-POSTER" OF AMERICAN MAKE
Of superior workmanship and very consistently designed. Date about 1840.

under the Georges and under Napoleon, but it was differently placed and executed.

The most common forms of Empire ornamentations, those by which the style can always be recognized and classified, are first, the claw of the lion or wild beast, for while the claw was often used as a feature of Georgian furniture, it was invariably the claw of a bird holding a ball; scrollings of various kinds more or less Egyptian in character; wings; sphinx heads; mummies; griffins; cornucopias; and, as floral ornamentation, the acanthus leaf in a hundred different phases, and the pineapple tree and tree trunk. With these as the basic ideas were combined other decorations too numerous to mention.

Empire styles as originated in France were soon introduced into other countries, for a style in furniture can flourish to itself no more than a style in dress, or a style in literature. Just as the English cabinet makers adopted the ideas of Louis XIV, XV and XVI, as well as all the delicate

refinements of form favored by Marie Antoinette, translating them into good English; just as they had adopted the ideas of the Dutch, so now they seized upon the styles of the French Empire. Toward the end Sheraton's work became strongly Empire in feeling. His bedposts, for instance, became massive and were carved in the heavy, deep-cut French manner. He also made free use of the lion's claw and Egyptian scrollings, which were quite different in character from the scrollings of the broken-neck cornice introduced under Queen Anne and used very generally under the Georges. But English cabinet-makers seldom, if ever, used the sphinx, the mummy, or wings as decorations. These ornaments were exclusively French, their use being a direct compliment to Napoleon and his Egyptian campaigns; just as later the torch, the eagle and the wreath were the popular French ornaments, being, as they were, symbols of the Emperor's truly Roman authority. Empire proportions,



FIG. VI. AN INTERESTING BED OF FRENCH MAKE. EARLY NINETEENTH CENTURY



FIG. VII. SINGLE "FOUR-POSTERS"

With plain turned posts. American made, about 1850. Owned by Colonel D. B. Dyer, Augusta

however, became the rage everywhere. All four-posters, whether made in France, England or elsewhere, were high from the ground with gigantic columns.

A perfect example of the richness and beauty of the Empire style at its height is the Tompkins bed shown in Figure I. Here we have true Empire proportions. The bed is enormously wide, the columns tall and richly foliated. Never was the always elegant and desirable acanthus leaf put to better use. The headboard, so often left plain in even the handsomest beds, is here treated with Egyptian scrollings. But for these, which are so suggestive of the Empire, the bed might be a late design of some such artist as Sheraton. The posts suggest his later work, which goes to show how, tired of lightness, wearied of painted furniture, he adapted his design to the taste of his neighbors across the channel. The

Tompkins bed is made of the finest San Domingo mahogany.

In Figures II and III we have superior examples of Empire styles as conceived and executed by French cabinet-makers about 1815. There is at once a brilliancy and a delicacy about both these beds that render them particularly charming. Nothing could be more simple—or more French—than the headboards with their two rosettes. The posts of Figure II are at first bewilderingly elaborate, but out of the froth and foam of carving it is at last to be discerned that the acanthus motif still prevails, every section being decorated with it except one, in which the pineapple is used. The pineapple is said to have first appeared as a decoration on mahogany furniture about 1800. Therefore no bed showing it can be over one hundred years old. But even that is a great age for mahogany when you con-

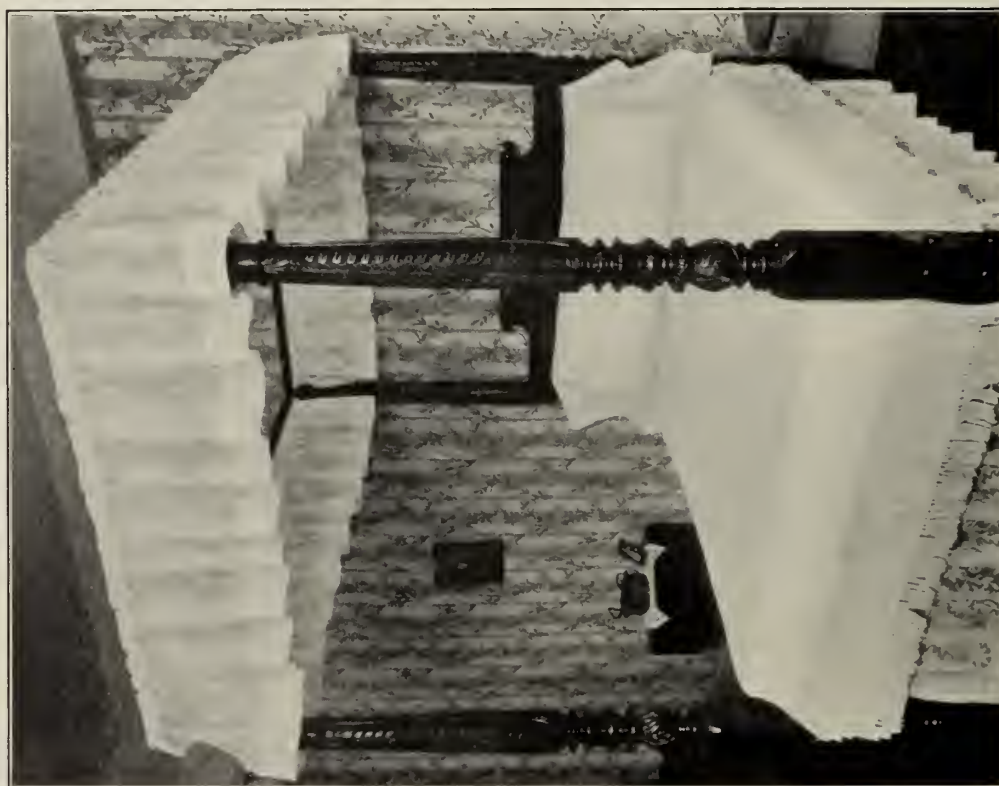


FIG. VIII. A SUPERB OLD-ENGLISH BED
Owned by Mrs. Moultrie Sessions, Marietta, Ga.



FIG. IX. A FRENCH "FOUR-POSTER" OF 1860
Showing the extreme decadence of the style

sider that no furniture made of this wood is over one hundred and fifty years old, mahogany having been first popularized by Chippendale.

Figure VI is a very unusual piece of French work, date about 1830-1840.

Nothing more finished and admirable than the designing and general character of this bed can be conceived, and nothing, on the whole, more distinctive. It reflects the influence of both the four-poster and Napoleonic bed, as is shown by the use of the columns together with the footboard, which is a replica of the headboard though lower in construction. The scrolled effect of the head and footboards is produced by the use of the cornucopia filled with flowers, the effect being quite distinguished. The columns are most elaborately ornamented from top to bottom. Not a plain space remains. Here the acanthus leaf and the feather combined produce a rich effect. Beds of the peculiar style finish and originality are rare, and though of not particularly early date, cannot be too highly valued.

In Figure IV we have an example of Empire styles translated into good English. Here we find again the proportions of the Tompkins bed. The columns are strictly Empire in size and general character, but their ornamentation is English. The twist of the column is good old English, having been used on the black oak beds of the Stuart period. For the further decoration of the posts the acanthus leaf is used, the headboard being left quite plain.

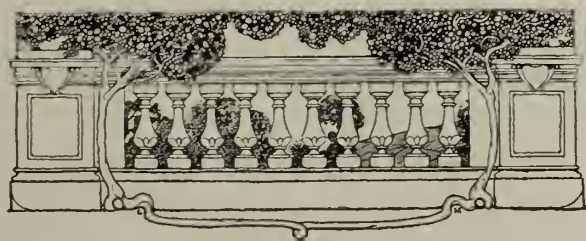
In Figure VIII we have still another Empire bed of English make, date presumably 1840. By then the columns were made even more gigantic and the general character of the bed heavier. Gone forever is all the delicate attenuation of Hepplewhite and the Adam brothers, for English cabinet-makers are enamored of the cumbersome as Queen Titania was enamored of Bottom. This bed seen in the wood is most impressive, possessing as it does a fine dignity. The carving is good but not remarkable, the feature of the bed

being truly its proportions. Beds of this character, no matter how French in design, are truly English in feeling. Their original cost was not less than \$150 or \$200, for a large amount of wood was consumed in their manufacture. Now such beds may be bought for \$75 and even less.

Not only were Empire styles translated into English, but into American as well, and scrollings and claw feet, modified and simplified, inherited in due time the erroneous nomenclature "Colonial." Figure V is an example of an American made Empire bed. This piece of furniture is designed with the most consistent simplicity. The posts are fluted, this being their only ornamentation.

Figure VII shows two single four-posters which are obviously American made. Though here used as twin beds, they are not duplicates, being in much quite dissimilar, though possessing, on the whole, the same proportions. They afford a good example of the decorative uses of the turning lathe beds of this character, costing originally from \$25 to \$40, when made to order, as all furniture was at that period. All through the South they can be now bought up for between \$10 to \$15 in their unrenovated state, though dealers buying them and carrying them north demand high prices for them.

The last and final expression of the Empire (its decadence, alas!) is illustrated by the bed shown in Figure IX. Here we have the last form of the four-post bedstead before it was laid aside in favor of the new black walnut, which was in general but a tiresome revival of Queen Anne styles. The ideas back of this bed have little to recommend them, and furniture of this character may be considered the least popular phase of mahogany. Originally such beds were enormously expensive. They were made of the richest wood, yet so little are they desired now by discriminating collectors that I saw one sold at auction in New Orleans last winter for \$12.50, though the room was full of dealers, there for the purpose of picking up bargains



How to weave Hand-Woven Rugs

By M. T. PRIESTMAN

WITHIN the last few years there has been a great revival of all kinds of hand-made articles, and especially weavings of all kinds, resulting in good hand-made rugs which are now obtainable in many of the shops. The occupation of weaving is a very delightful one, and many women are taking it up seriously and are weaving rugs of simple patterns for their summer cottages. When they try to make designs, however, they usually have no little difficulty in finding out how it is done, owing to the fact that there is so little written on the subject. A few practical suggestions as to the making of hand-woven rugs with explanations of pattern weaving will be a help to those who are interested in this subject.

THE KIND OF LOOM TO USE.

Modern looms at high prices, although they may look more finished, and are less bulky, are no better for the actual work than the old wooden loom of Colonial days. The old ones are, to all intents and purposes, as good as any on the market, and they have the advantage of being very inexpensive. They can be picked up at junk shops, and other out-of-the-way places, in country districts, or an advertisement in the paper will usually put the buyer in touch with a would-be seller. If possible, it is best to have the loom placed in the attic, or in a shed, as the lint made by the weaving is considerable, and it therefore needs a room all to itself. These old-fashioned looms vary in price from five dollars up to twenty-five, the cheaper price being paid when they are bought at a junk-shop, as there they look upon them as hard things to sell, and are always willing to get rid of them, at almost any price. When an old loom is not to be found,



RUGS OF MANY SIZES THAT CAN BE MADE BY HAND

new ones can be purchased from manufacturers. They vary in price from thirty dollars up to over a hundred. A table loom can be bought at Lynn, Mass., and is known as the Woodbury loom. This costs \$12.00, but as it is narrow it can only be used for very small rugs, or for stair carpeting. The work is not so rapidly done on the hand loom as on the treadle loom. The majority of the latter make a rug a yard wide.

When buying a loom it is most important to know what pieces it should consist of, for if some are missing, it is an expensive item to have them made. A loom should consist of a frame, two beams, heddles, a lay, reed and shuttles, and a temple. A wheel for wind-

ing the materials usually comes with the loom. When buying a second-hand loom it is important that it should be examined by someone who understands weaving, or it will be found when the loom is ready to be erected that the most important part is missing.

HOW TO PREPARE THE LOOM FOR WEAVING.

After the loom is put up, it is ready for the warp. The beaming of the warp is a somewhat difficult process, and whenever possible should be done by a beamer. The man who sells the warp can always give the name of a beamer, and the warp can be sent direct to him from the warpers, together with the beam for the loom. When this has been accomplished, the beam is placed in the back of the loom, and the warp threads are carried from the beam over the back cross-bars, and threaded through the two sets of heddles, then through the reed, and over the front cross-bar of the loom, where it is attached by an iron bar which is connected with the cloth beam. The heddles are arranged in two or more frames, which

are on different horizontal planes when the shuttle is thrown through the warp.

The warping or threading of a loom must be seen to be understood. When this is comprehended, weaving is only a matter of practice and experiment. If a weaver can be found who would erect the loom, thread the warp and spend the rest of the day in showing the beginner how to weave, it would save an endless amount of time, and the patience of the novice would not be exhausted by trying to master this technique alone in the beginning. I do not believe anybody could thread a warp without being shown, so that I am not going to waste our valuable space in explaining the only difficult process. When once understood it is very simple.

As people who make an entire business of selling warps are not frequently to be found, it may be necessary to buy the warp from the village store, where they are sold in country districts, especially in the centers where weaving is still continued.

WHAT MATERIALS TO BUY.

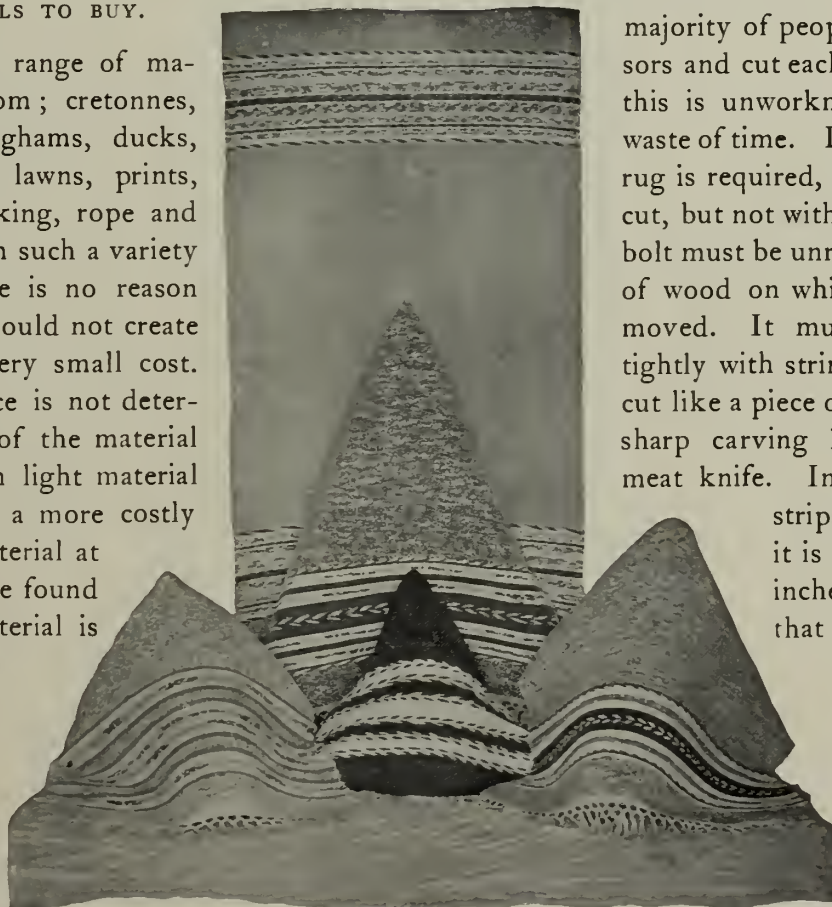
There is a wide range of materials to choose from; cretonnes, denims, sateen, ginghams, ducks, unbleached muslin, lawns, prints, cotton flannels, ticking, rope and roving yarns. With such a variety at his disposal, there is no reason why the craftsman should not create an artistic rug at very small cost. The question of price is not determined by the cost of the material by the yard, as often light material at 7 cents will make a more costly rug than a heavy material at 15 cents. It will be found that if the light material is used, it must be torn into wide strips, as it naturally weaves into very small space. Many people advocate cheese-cloth because it is cheap. I have proved that it is one

of the most expensive materials to weave. It is always more economical to buy a bulky material, that can be cut into narrow strips like cotton flannel and heavy duck. These goods can often be obtained at wholesale when bought by the piece, and this is the only economical way to buy them. Materials known as "seconds" are also very good for home weavers, as materials that are marked or blemished in the weaving do not show when crushed up in the rug, and are, therefore, just as valuable to the weaver and yet can be obtained at half cost at such places that make a specialty of buying up odd lengths and seconds from the factories. They are usually sold by the pound. As these odd pieces cannot be matched again, they can only be used for individual work. The strips can be cut from three-quarters of an inch up to two inches, according to the weight of the materials.

HOW TO PREPARE THE MATERIALS FOR WEAVING.

Suppose, for instance, that a bolt of blue denim has been purchased. The majority of people would take scissors and cut each strip by hand, but this is unworkmanlike and a great waste of time. If a smooth finished rug is required, the denim must be cut, but not with the scissors. The bolt must be unrolled, and the piece of wood on which it is rolled removed. It must then be wound tightly with string, when it can be cut like a piece of bread with a very sharp carving knife, or butcher's meat knife. In order to get the strips all the samewidth, it is well to indicate the inches on the table, so that the pencil marks are a guide for the knife. In less than half an hour the entire bolt will be cut in even slices.

If a rough woven rug is preferred, the



A GROUP OF HAND-WOVEN RUGS
Showing Great Variety in the Borders

material must be torn. Some fabrics tear very much better than others. Duck, denim, Canton flannel and unbleached muslin, all have a delightful fuzz when torn which makes a very artistic rug. The tearing takes longer than the cutting with the knife, but young helpers can often be made happy by being allowed to assist in the tearing. The best way of doing this is to take a measure and cut the cloth for two or three inches. This insures the material being torn straight, a most important item in good rug making. The bolt can be divided into lengths of twenty yards. As the strips have been begun two strips will come off simultaneously, and the work becomes a pastime for the youngsters. If only one person is doing the tearing, only one strip can be torn at once. It seems to go very much easier if it is torn quickly, as people who do it laboriously seem to come across all sorts of kinks in the material. Another most important point to remember is, that as each strip is torn off it must be wound into a ball, or the strips will get entangled and the good material wasted. It is also apt to become too fuzzy by not being balled at once.

HOW MUCH MATERIAL WILL EACH RUG REQUIRE.

The most practical way of finding this out is to weigh every bolt of material that comes into the house, and write down in a book its weight and the number of yards in the piece. Afterwards it can be ascertained how far it went. As each set of rugs is woven each should be measured and weighed and the exact amount jotted down. By this means not only the weight of the rug is ascertained, but the number of yards used. As a rule, about two and one-half pounds,

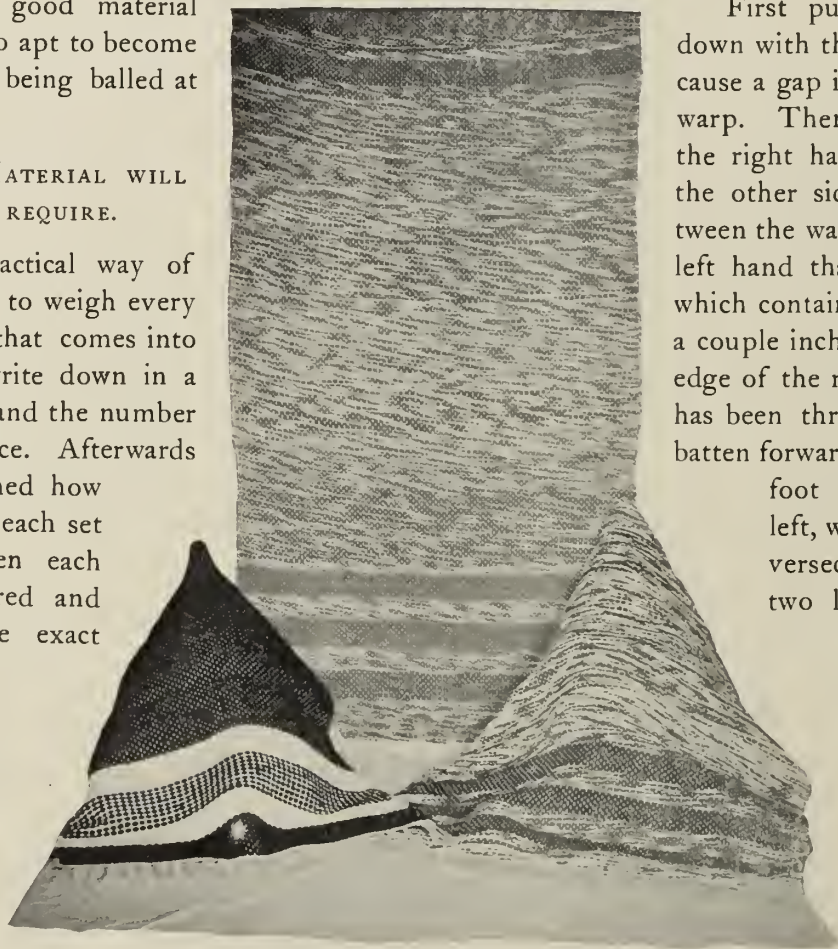
or from five to seven yards of denim, will make one yard of weaving. If the strips are torn, or cut carelessly, and are wider than an inch, three or four yards could be wasted in a 3 x 6 rug without improving its appearance, so that this extravagance cannot be too carefully guarded against. I have talked to weavers on this point and they say sometimes on a batch of rugs they have lost money because they have been careless in this direction.

THE PROCESS OF WEAVING.

The material, having been divided into strips and wound into balls, must then be wound off the balls on to an iron rod, which is turned by the winding wheel. It is then ready for the shuttle, the iron bar being removed before it is placed in it. One end of the material is pulled through the hole at the end of the shuttle and is now ready for weaving. A seat must be chosen that is just the right height, so that the weaver has a good command over her work.

First push the left treadle down with the left foot which will cause a gap in the two layers of warp. Then take the shuttle in the right hand and throw it to the other side of the loom between the warps, holding with the left hand that part of the loom which contains the reed. Leave a couple inches of material at the edge of the rug. After the shot has been thrown, pull the lay or batten forward, and press the right foot down, releasing the left, which will make a reversed gap between the two lays of warp. The shuttle is then placed in the left hand, and is thrown from left to right between the warps, the lay being pulled forward between each throw.

This is the simple process of weaving, repeated

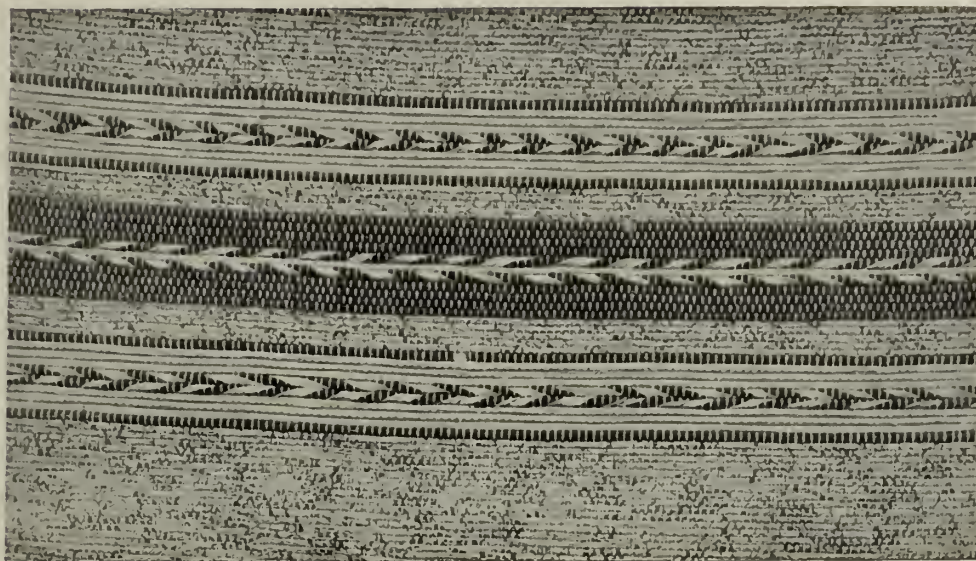


A GROUP OF HAND-WOVEN RUGS
Of Bold "Mission" Design

over and over again until the shuttle is empty. When the new shuttle-full is added do not sew the two strips together, but cut each into a tapered point and overlap them. This joining will then be invisible, which cannot be said of amateur work when a bulky sewn joining is often in evidence. Before beginning to weave with the material itself, the shuttle is filled with warp, and this is used to make the heading of the rug before the material is woven. A heading of about one inch is usually enough, and six inches of margin must have been left for the fringe before the heading is commenced. When an inch of heading is woven, the shuttle of material is used as already directed. This can be woven for about five inches when a plain band of contrasting color can be woven for about the space of two inches. The original color is again used for about three inches, returning again to the two-inch band of plain. Repeat this until three or five bands of plain color have been inserted for the border.

A 3 x 5 foot rug should only have about three strips for borders while a 3 x 7 would need five. In order to keep the material firmly stretched when weaving, two strong hooks are attached to ropes at either side of the loom. These hooks are caught at the edge of the rug and are heavily weighted and serve to keep it firmly stretched while being woven. These must be moved every few inches and take the place of the old-fashioned temple. It is not usual to take the rugs out of the loom until the set that is being made is completed. As many as forty rugs can be wound up on the roll underneath. Always leave twelve or more inches between each rug for the two fringes. These are afterwards cut apart.

When the weaver has obtained proficiency in plain border weaving, she can then proceed to the more intricate patterns. These are made in several ways, but all are simple when understood.



THE BORDER OF A RUG SHOWN IN DETAIL

Twists, or "crow's-feet," as they are called, are made by tightly twisting two contrasting colors together. These are wound into a cop as if they were one strip, and shots of this can be introduced at the sides or center of the border to give variety. The crow's-foot is an equally simple design. This is effected by two rows of twists one from left to right and the other from right to left.

Another practical way of making beautiful designs is to use a strongly striped material, with bands of color six to twelve inches apart. Some of the cheap muslins sold for curtains with a cross stripe give excellent effects. When several strips of it are woven, a blurred effect is given of color in sections, and makes one of the most artistic borders. On looking at the illustration of the first group of rugs, this border is illustrated on the left, and also in the figured rug in the center of the group. Two twists can be noticed in the dark red rug with the two white borders. Two rows of twists are used which give a particularly attractive finish for a rug with a very simple border treatment, and is within the scope of the beginner. The plain red rug with the three white borders consists of eight shots of unbleached muslin, and the same number of shots of red divides the three white borders.

In this group, it will be noticed that the rug used as a background is of plain material, with quite an intricate border. The background of the rug is made of plain cretonne with one shot of a stronger color and white outlining the border. Then follows one shot of white and three shots

of figured cretonne, and another of white. Then the dark color is again introduced and one band of white and three of cretonne. Then follows two shots of white and four rows of cretonne, another row of white, and a herringbone of the dark color and a medium shade. This brings us to the center of the border, which is repeated. As this pattern is made in all colors I am only describing the materials used.

Another style of rug has the loom differently threaded for the weave. Instead of threading the warp separately through each heddle, two strands are threaded through one heddle, and the next is skipped, while two warps are put through the next heddle, and so continued which makes the material when woven of a loose, soft texture particularly pleasing for portières, or curtains, as well as rugs. The border in this kind of rug is made by first weaving twelve shots of white, then one shot of color, alternately, for three inches, then twelve more shots of white. This is a very easy border to make, and yet is one of the most effective. The same design could be used when one warp is threaded through each

heddle, although the effect would not be quite the same as in our illustration.

Our detail illustration of the border of a rug is made as follows. The ground work is of figured cretonne, the kind that retails in the stores at 18 or 20 cents a yard. The border consists of one shot of the strongest color in the cretonne, three of cream, and two shots form the crow's-foot. Then follow three rows of cream and an outline of the dark color. Five shots of cretonne divide the borders. Eight shots of the strongest color forms the center border which is divided by a crow's-foot, which is strengthened by having a line of white run through the center. The third band is the same as the first. By carefully noting our illustration, any weaver could copy this design, which is very effective and can be carried out in practically any color scheme. By following closely the above directions, a craftsman can readily make any of the rugs illustrated, and as these can be obtained at most of the prominent stores one could be bought if it was found easier to weave from another rug rather than an illustration.



AN OLD COURTYARD IN AUSTRIA

Showing a picturesque effect obtained by roughcast walls and balustrade. The view is in the village of the Spitz which has enough of the southern climate to require balconies and other open-air living spaces within the confines of the house.

A Charming Small House

DESIGNED BY AN ARCHITECT FOR HIMSELF

A PHYSICIAN treats his own family by calling in a fellow practitioner. A lawyer often declines to plead his own case. Not so modest of his powers is the architect. He is only too glad to design the house which is to be his own home. He knows what he wants and how to get it, in so far as the disposition of space and materials will permit. Upon the eccentricities of soaring cost, however, he would in most cases be willing to confess ignorance, nor can he hide his disappointment when he finds that certain of his cherished ideas may not be embodied in the first house which he is to own and occupy. He must, therefore, do as many of his clients do: select the essentials. It is interesting to note what these essentials to a cottage home are held to be by an architect who has made a specialty of this type of structure.

In the house illustrated Mr. Aymar Embury II convinces one that a fine living-room insures much of the pleasure of having a house. The stairways may be condensed, closets may be

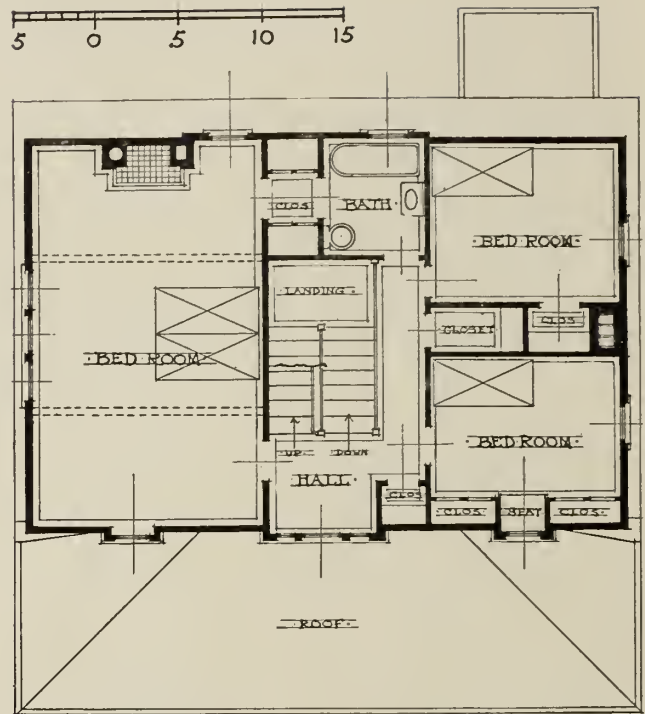
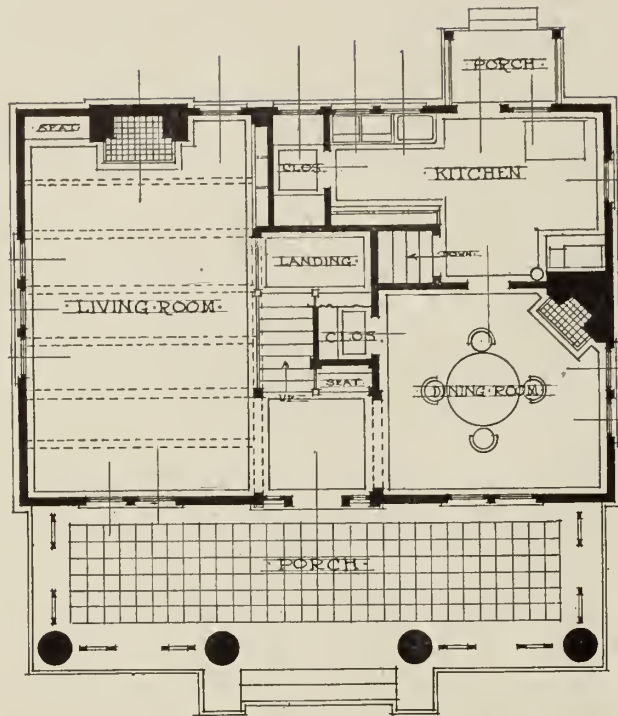
tucked in beside them, without too great a sacrifice of convenient space, but the living-room must be one clear, well-proportioned apartment of about 14 x 23 feet.

The dining-room and the kitchen may follow certain standard sizes, which, in turn, follow rather closely the appetite of mankind. A household range and a dining-table afford for these rooms a scale of measurement which varies little. Obviously there is far less diversity in cooking and eating than in the more individual occupations of the living-room. Laundering, too, is mere laundering, and three trays for it will suffice. They are placed in the kitchen without disadvantage. Back stairs and a pantry are deemed unnecessary.

Upstairs the taste of the architect owner holds sway in a bedroom the same size as the living-room below. A bathroom is connected with it through a passage having closets on each side. It is also reached from the hall, and thus serves the remaining bedrooms on this floor. Two



THE FRONT OF THE HOUSE
Showing the Pleasantly Screened Veranda



PLANS OF THE FIRST AND SECOND FLOORS

*House of Mr. Aymar Embury II**Beech Road, Englewood, N. J.*

more bedrooms and a bathroom are in the third story.

The finish of the living-room and stairway is North Carolina pine stained a dark brown, harmonizing with ceilings covered with gold-toned grass cloth. The kitchen walls and ceiling are white enameled; the floor is of "monolith." All the hardware on the first floor is finished

in dull green; on the upper floors it is old brass.

The lower story of the house is buff stucco upon metal lath; the upper stories are of shingles laid eight and one-half inches to the weather. All trim in the lower story is stained a dark brown, with the exception of the veranda trellises; these are white, as is all the trim on the second story. The roof is stained a very dull brown. The veranda floor is of brick laid herringbone.

To house so many rooms and yet insure a low, cosy aspect for the dwelling is not an easy matter; and the success of the design is doubtless in the adoption of the gambrel roof, the eaves of which are brought down over the veranda to gain the squat appearance which is nearly always desirable. It symbolizes comfort, and in this case it signifies also domestic economy and a compactness which still admits of future expansion in the size of the house.



A VIEW OF THE LIVING-ROOM

How to Lay Out and Build the Driveway

By RICHARD SCHERMERHORN, JR.



A Driveway treated with Patented Preparation for Laying the Dust and Preserving the Surface

THE first thing to consider after the country property has been purchased and the house located and designed is the matter of roads and walks. It is well to view this in two different aspects, *i. e.*, that of the small suburban property and of the large estate. In the first case, we may assume the property to be rectangular and the house set some distance back from the highway. An old custom was that of planning the driveway to enter the property midway between the side boundaries. More attractive results seem to be realized nowadays by arranging the drive to enter from a corner of the property and follow a single graceful curve to the house. At the same time, if the extent of the property permits, another road can be planned to enter from the opposite corner and to be used as a service drive, thus avoiding all disagreeable conditions in connection with the main drive. Where the road reaches the house and passes the *porte-cochère* sufficient space must be allowed for several carriages to stand, or at least enough for them to easily turn. A grass plot of oval shape with the drive encircling it is thus often left, or else the road covers the entire space. The latter is much the preferable condition, as the former does not lend itself to a sufficiently harmonious treatment with the rest of the place. If the property is hilly, the road whose course will follow the contours of the ground as far as possible, and at the same time be sufficiently graceful, will naturally be the most fitting.

On estates of considerable extent the chief point to bear in mind is to avoid straight and geometrical lines and pay particular attention to scenic conditions. It is natural of course to give

a formal character to the entrance (this, however, according to the general character of the estate), but after this, one can lay aside precise instruments and lay out the course by means of the eye alone. Heavy cuts and fills should be avoided; but when they are necessary much care should be taken in regulating the side slopes. Some authorities forbid retaining walls where it is possible to cut and fill without excessive cost. If these walls are necessary they should be obscured by planting. It is very important to pay particular attention to the character of the scenery that is met with along the course of the road. Sometimes very little extra labor is required to cut away certain thicknesses in heavily wooded parts and thus leave occasional open spaces affording views of fields and meadows.

The minimum width for a driveway of any class is 8 feet. 15 feet is of sufficient width for one carriage to pass another comfortably, but a 20-foot roadway is generally the most desirable for appearance as well as actual convenience. Formal driveways in the immediate vicinity of pretentious buildings are of course much more imposing if their width is increased beyond actual needs. It is very seldom, however, that a driveway wider than 30 feet on a private estate would fulfill a purpose or produce an effect of any desirable character.

The level or nearly level road of course is, for practical purposes, the ideal condition; and for strict comfort and easy travel the grade of a road should not be over four per cent. Six per cent grades may be allowed in some cases, although they are not to be sought after, but

when eight per cent is reached it is time to seek remedies. There is, however, a great difference between a long stretch of comparatively steep grade and a short stretch, and while the former must be avoided whenever possible, the latter sometimes can be admitted with very little inconvenience. A very important point also is that no matter what the opportunity a road should not be graded absolutely level. Sufficient fall must be given for proper drainage, and although conditions govern most cases, if it is possible to plan for not less than a one per cent grade, it is well to do so.

Roads may be generally divided into two classes, earth roads and stone roads. The former is the cheaper type, but the general principles of construction are the same in both cases. In fact, an earth road requires exactly the same attention and the same applied principles as the stone road, up to the actual stage in the latter case, of depositing the stone on the finished roadbed.

The first step in actual construction consists in the clearing away of all timber. Especial care should be taken to transplant all trees encountered in the course of the roadway which may do for planting again in various parts of the estate. While this seems a perfectly natural thing to do, it is always well to issue careful instructions regarding this or much good material is apt to be wasted. Many large trees, of course, must necessarily be destroyed; but it should be provided that these be cut up and sawed in even lengths, and then piled systematically along the sides of the roadway for future use. Top soil is generally scarce on most estates, and all that it is necessary to excavate, or upon which filling would be placed, should be carted off apart from other earth and placed in convenient heaps, so that it can be used eventually to cover the side slopes and for various other purposes.

We may then assume the road to be graded with cut balancing fill, and the time arrives for shaping the roadbed and giving it the proper constituency. This cannot be too carefully done, as upon it depends the future character and durability of the road. A surface of pure, fine sand or one of hard, stiff clay are the extremes, and an even mixture of one with the other forms the proper mean. There is nothing better than a substantial foundation of sand. Upon such a

surface, if a layer of mixed clay and gravel is deposited, and this rolled thoroughly until a proper compactness and even distribution of material is provided, a good road will result. If, on the contrary, the road bottom is stiff, heavy clay, it is necessary to procure some lighter material for mixing, which, when rolled in, will form the desired firmness and evenness.

The drainage question is very important, in fact, the manner in which it is treated generally makes or mars a road. The profile or elevation map of the road should always be studied carefully in connection with this, and provision made so that water will not naturally stand in or drain on the roadway. In sections where cobblestones are plentiful and grades are steep cobble gutters are useful in carrying off this surface drainage. Catch-basins can be built every two or three hundred feet to receive the flow from these gutters, connecting to pipe or culverts leading the water to a point beyond the road slopes. Cobble-stone gutters are preferable on private estates, as they avoid the use of unsightly side ditches, which so mar the appearance of ordinary highways, and without either it would be impossible to maintain a road in good condition. Sod gutters are sometimes used, but as these require considerable attention in maintenance, it is doubtful if they are as practical in the end, while brick or concrete gutters give too harsh an appearance, and except for short lengths of road are much too costly.

For general effect, the crown of a road should be as flat as possible. However, the slope should never be less than one-quarter inch to the foot, and really this is much lower than it should be for practical purposes. This crown should be shaped very carefully and compactly, because constant traffic is apt to wear it down eventually, no matter how great it is.

The use of stone surfacing or macadamizing has really two purposes, *i. e.*, to maintain a proper shape to the road and to keep the roadbed dry. This latter point is very important, and if stone is so deposited, filled and rolled, that it does not actually result in a waterproof covering, its chief purpose is gone. It is evident that if the foundation for this stone is first not made solid by rolling and the proper mixing of material, there will be not only a considerable waste of stone, but it

will be impossible to obtain a hardness for the surface itself. In low, wet and badly drained territory, the Telford road is extremely satisfactory. This differs from the macadam only in that the bottom is practically paved with large stones, set and rammed by hand to a solid bed, with interstices filled with chips and then a thin layer of small broken stone placed on top. Providing a good foundation or roadbed is obtained, a very thin covering of broken stone is all that is necessary on any private estate road. A finished thickness of four inches should be plenty, except where heavy trucking is to be borne, when probably six inches would be better. Very few rural public highways have a depth over eight inches, and many are less. The depositing and regulating of this broken stone may be briefly outlined as follows :

Spread stone on in layers not over four inches in thickness. Roll this with heavy roller, working from sides toward center. Spread layer of sand (unless clay is all there is at hand) over this surface and sweep in with broom until interstices are filled. Place on second layer, bringing road up to required thickness, allowing, of course, for shrinkage. Roll thoroughly and deposit one inch of stone screenings or dust, brushing this in carefully. Then water road thoroughly by means of watering cart, and continue watering and rolling until the action of water in front of roller shows that the spaces between the stones have all been filled, and the road is practically water-tight. The volume of stone will shrink after rolling to about one-quarter of the original amount ; that is, the actual amount required is about one and three-tenths times the theoretical or calculated amount.

The question of selecting the proper kind of stone depends more upon the locality than it does upon the actual advantage of one class over

another. Trap rock, limestone and granite are all used to considerable extent. Limestones generally give a desirable effect, but even the best have poor wearing qualities. Trap rock is undoubtedly the best for wear although its dull appearance does not appeal to some persons. Most of the granites have poor cementing qualities, containing more or less mica and quartz, and do not either bind or wear well. There are very few gravels which are good for road surfacing other than as a medium for consolidating the road-bed beneath them. Oyster shells form a very good covering for earth roads, if well rolled, broken and compacted. They have a peculiar binding quality which tends to form a very solid and well-regulated road bed.

The cost of a roadway depends so much upon the amount of grading necessary that no constant figure can be given. Macadamizing itself costs from fifty cents to \$1.25 per square yard, the first cost probably being sufficient for most private estates. This cost varies according to the distance from stone quarries, the cost per cubic yard of broken stone by scow load varying generally from ninety cents to \$1.50. Records show that roads in New Jersey, where remarkable progress in road building has been made, are improved and macadamized at a rate from \$5,000 to \$9,000 per mile. This is for a road-bed twelve feet to fourteen feet in width and six inches to eight inches in thickness. The grading in these roads of course is light, the actual macadamizing averaging about two-thirds of the whole cost.



Picturesque Salzburg

A View from the Meadows showing the Ursuline Convent, Nonnberg



CLOCK BELLS THAT TELL TIME.
—Some of the early Dutch and German clocks were furnished with two bells, one larger than the other, mounted on the top of the case. The hour was struck on the larger bell; the first quarter noted by one stroke on the smaller bell; at the half-hour, strokes corresponding in number to the previous hour were given on the smaller bell, and the third quarter was proclaimed by one stroke on the larger bell. This plan has the advantage of giving fuller information than modern methods. Where one stroke is given at the half hour, as in most modern French clocks, half-past twelve, one, and half-past one convey the same unmeaning sound.

ORNAMENTAL SILVER WORK, WHEN NEWLY WHITENED AND POLISHED, always looks unpleasantly white and glaring. Time will remedy this, but the process can be hastened. To this end, the metal may be oxidized by exposing the surface to the fumes of sulphur, or washing with solutions of any of the chemical compounds of sulphur, such as potassium sulphide, ammonium sulphide, barium sulphide, etc. Ammonium sulphide is generally used, and to polished silver it gives a range of color varying from pale golden straw through deep crimson to purple and bluish black. The depth of the color depends on the strength of the solution and the length of time the metal is exposed to its action. A pale straw color of a hot solution of the ammonium sulphide will be of the proper strength. Brush a little of the solution over the metal, watching closely until the color desired is produced, then quickly wash in clean water and dry. If the surface is then rubbed with chamois leather a much richer, older appearance will be obtained. This process should be performed in the open air, if possible, as an offensive odor is given off.

IN ARRANGING CUT FLOWERS, it should be remembered how much artificial light affects the coloring. Some qualities of electric

light show the colors almost as by daylight, while others produce entirely different effects. Blues and violets should be avoided as they take on a dull appearance. The quality is intensified in lilac-colored flowers, and some shades of purple may be used. It is better, however, to hold to white, red and yellow flowers, as these are always the safest for both daylight and artificial light. Bright greenery is always brighter in a yellow light, as are also reds and yellows.

WHY NOT SMALLER PIANOS?—With the steady decrease of space in which many persons are obliged to live, there has been an accompanying decrease in the size of household furniture. New devices, moreover, which comprise two articles of furniture in one, such as the folding-bed and its variants, are constantly appearing on the market. It is strange that household essential, the piano, has been so little modified. In many civilized countries our American pianos are not favored on account of their great size and weight, also their shape, finish and decoration. If a small and light piano, easy of transportation, were produced, there would certainly be a demand for it. The old-fashioned harmonichord had these advantages in addition to grace of form and ornate enrichment. In it a basis might be found for developing a modern instrument having the above convenient qualities.

A SIMPLE FERNERY.—Now is the time for an afternoon's ramble in the woods, which will lead to the discovery of many species of small ferns, including the dainty maiden-hair variety. These, arranged in a medium-sized fish bowl, in a moss setting, and interspersed with sprigs of the foxberry, will, during the winter, gladden the heart of the shut-in folks who have neither the space nor the time to care for plants which need much attention. Sprinkling with water occasionally — every two or three weeks — is all the care necessary, and a thin glass plate on the top of the bowl keeps out dust and prevents evaporation.

INDOORS

THE
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MAGAZINE

AND OUT


DECEMBER



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THE HOMEBUILDERS' MAGAZINE

ROGERS AND WISE COMPANY

PUBLISHERS 85 WATER STREET BOSTON

NEW YORK OFFICE, 4007 METROPOLITAN BLDG., 1 MADISON AVE.

Copyright, 1905, Rogers and Wise Co.

Entered at the Boston, Mass., Post Office as Second-Class

Mail Matter, October 14, 1905.

SUBSCRIPTION PRICE, \$3.00 A YEAR IN ADVANCE. FOREIGN SUBSCRIPTION, \$4.00
TO CANADA, \$3.50 A YEAR SINGLE COPIES, 25 CENTS

For Sale by All Newsdealers in the United States and Canada and by The American News Co. and its Branches

Contents for December

VOL. V

1907

No. 3

THE TERRACE OF "MAXWELL COURT"	Frontispiece
A STATELY HOUSE UPON A HILLSIDE	93
	(Illustrated)
ABOUT FIREPLACES	101
THE EVOLUTION OF A MAN'S FLAT	By W. J. H. Dudley 102
	(Illustrated)
THE ART OF APARTMENT-HOUSE LIVING	By Florence Finch Kelly 106
COMPLETE DESIGNS FOR AN UNBUILT HOUSE	By William G. Rantoul, Architect 108
	(Illustrated)
A MODEST COTTAGE BUILT OF WOOD	111
	(Illustrated)
OLD WILLIAMSBURG TO-DAY	By E. N. Vallandigham 113
	(Illustrated)
FLOWER FESTIVALS OF THE AMERICAN RIVIERA	By Waldon Fawcett 118
	(Illustrated)
A COMFORTABLE AND ATTRACTIVE SEASHORE COTTAGE	121
	(Illustrated)
A BIT OF "SPOTLESS TOWN"	By W. A. H. 124
	(Illustrated)
ORNAMENTAL WATERWAYS IN A CITY'S MIDST	By George B. Ford 126
	(Illustrated)
WALK CONSTRUCTION	By Richard Schermerhorn, Jr. 129
AN ATTIC TRANSFORMED	By A. J. Harper 130
	(Illustrated)
BORDENTOWN WATER GARDENS	By M. H. Darling 131
	(Illustrated)
A SMALL HOUSE THAT IS WELL DESIGNED	By H. M. K. 133
	(Illustrated)
BEAUTY INDOORS	136



THE TERRACE OF 'MAXWELL COURT'

Indoors and Out

THE HOMEBUILDERS' MAGAZINE

VOL. V

DECEMBER, 1907

NO. 3

A Stately House upon a Hillside

"MAXWELL COURT," A RESIDENCE AND GARDENS IN THE ITALIAN STYLE AT ROCKVILLE, CONNECTICUT

FROM the hollow containing the busy manufacturing village of Rockville, several roads ascend to pleasant homes on the wooded hill-sides. Upon one of these roads is a formal entrance of semi-circular walls containing an ornate iron gateway. Through this the estate known as "Maxwell Court" is entered. A former wood dwelling has been removed and the natural hillside on which it stood has been utterly transformed. At the left are the lodge and the stable. Passing these, the drive runs level along the hillside and enters

THE FORECOURT OF THE HOUSE.

This is enclosed by high brick walls. Downward from the north comes a steep hillside bearing "the grove." This hillside has been cut away to form a level site for the house. It is the task of the wall to retain the weight of the earth above, where spruce and golden retinisporas grow near the base of long established forest trees. Through a recessed portion of the wall, surmounted by an arch of iron, streams a fountain, and concealed at one side is a stair leading to the ground above.

The architecture is of the Italian style,

and this requires to be set upon a horizontal plane in order to have its best effect. Obviously, a hillside does not offer such a site; but the owner, nothing daunted at this difficulty, had a level space created by cutting into the hillside upon one hand, and upon the other depositing earth and forming a terrace, the outer edge of which is upheld by a lofty retaining wall. Likewise was the level site for the garden obtained. Its parterres are formed upon some four thousand cart-loads of earth newly deposited for the purpose. In

such a situation a house has variety of outlook, and the garden the two opposite effects of being enclosed and of openly commanding a view. Upon both weigh the practical considerations of protection from the north wind and openness to the warm and cheerful south.

ENTERING THE HOUSE

the visitor first passes through a vestibule and finds himself in the entrance hall (illustrated on p. 101). Leaving this at right angles he finds a broad hall extending through the house to a loggia and to a brick-paved terrace, which overlooks the lawn formed and upheld in the manner



A CENTRAL FEATURE OF THE FORECOURT

From the Right of a Stream of Water flowing from a Bronze Lion's Mouth in the Niche, a Stair leads to the Grove on the Upper Hillside



THE ENTRANCE FRONT OF THE HOUSE, "MAXWELL COURT"

A View from the Grove

above described. From the right-hand end of the entrance hall a concealed door leads to a retired den, and beyond, on the right, is a reception room with walls wholly paneled and finished in French gray. Beyond this is

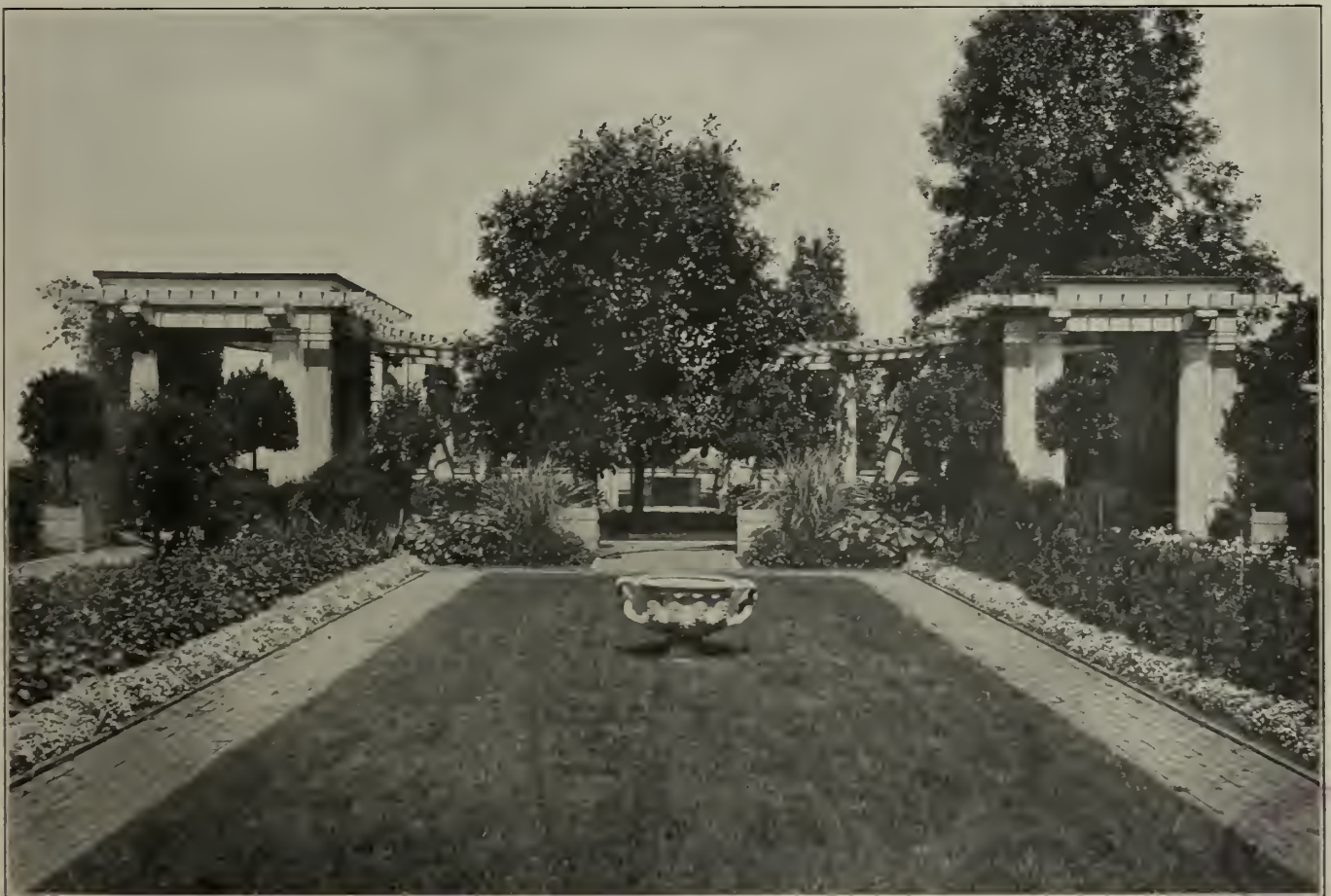
THE DRAWING-ROOM
OR SALON.

This room extends across the entire end of the house, and has on one side an old Italian fireplace, which is an antique obtained from abroad. The walls are paneled



A PATH OF THE GARDEN

their entire height with English oak, and within these panels minor doors are concealed, likewise the mechanical gear of an organ, the keyboard of which alone projects below a section of the wall perforated to emit the sound. The bookcase is also sunk within the wainscoting, so that the only objects projecting in the room are the beautiful and massive pieces of furniture, many of which are historical specimens and exemplars of their respective styles.



THE PERGOLA ENCLOSING THE FARTHER END OF THE GARDEN



CELEBRATED FORMAL GARDENS OF AMERICA — III

AT "MAXWELL COURT," THE ESTATE OF FRANCIS T. MAXWELL, ESQ., AT ROCKVILLE, CONNECTICUT LOOKING TOWARD THE HOUSE



CELEBRATED FORMAL GARDENS OF AMERICA—III

CHARLES A. PLATT, ARCHITECT

THE GARDENS OF "MAXWELL COURT" VIEWED FROM THE HOUSE



THE SOUTHERN FAÇADE OF THE HOUSE
Taken from the Summit of the Terrace Wall



THE NORTHERN FAÇADE OF THE HOUSE AND THE MAIN ENTRANCE
The Walls are built of Rough Brick and the Trimmings are of Indiana Limestone

The shorter axis to the salon, continuing through one side of the reception room, becomes, beyond, the center of a long hall which has tapestries hung on one side; upon the other, windows open to the loggia. This hall leads to

THE DINING-ROOM.

Here, the walls are covered with old Italian leather, carved, colored and otherwise wrought. The dominating colors of this material are crim-

and the roof upheld by monolithic pilasters and columns. From the center of this veranda extends a broad walk which parallels one side of

THE GARDEN

and, continuing through a semi-circular pergola in the distance, returns along the other side to the house. Within the space thus defined are two large rectangular parterres of grass, brick bordered. In the surrounding space crocuses



THE DRAWING-ROOM OF "MAXWELL COURT"

With its old Italian Mantel surrounded by broad Surfaces of Quartered Oak

son and gold, and they give a fine, rich tone to the walls and make a definite contrast with the ceiling, which is ornate in form, but colored in silver and subdued tones of gray. From the farther side of the dining-room a door opens on a piazza, and another door leads to the kitchen and pantries. These rooms also have direct access to the entrance hall.

On the axis of the salon extended outdoors is a spacious veranda ornamentally paved with brick

and tulips come and go as the season opens, and later, zinnias, irises, and foxglove appear, also stocks, phlox, Canterbury bells, larkspur, Japanese anemones, in front of the higher lilies, hibiscus and hollyhocks.

In one corner is the "children's garden" with Johnny-jump-ups, forget-me-nots, heliotrope and other sweet scented flowers growing close to the edge of the walk and in front of azalea mollis and cannas. Upon the north wall is climbing

euonymus, which, together with Japanese privet and spiræa, makes a protecting background for hollyhocks, rudbeckia and towering sunflowers. The border here descends to the walk by means of such smaller plants as cosmos, New England daisies and phlox. Euonymus here forms a hedge, and outside of it heliotrope hangs over a narrow curbing of cut bluestone. Within the semi-circle formed by

THE PERGOLA

are Japanese pinks, peonies and stocks, from the

flowers alone can supply, and this splendor is greatly increased by contrast with the shade of the woods on the hillside above.

Maxwell Court was built in 1901, when a tower of scaffolding was temporarily erected on the hillside below. From the top of this tower would be the only point from which a view of the façade of the house facing the terrace could be obtained, and the tower was built in order to obtain a true photograph. The scaffolding and



A VIEW OF THE DINING-ROOM

Where the Walls are paneled in Old Italian Wrought and Colored Leather

midst of which wistaria, wild grape-vine and Dutchman's pipe rise by means of the piers, and clamber over the beams forming the pergola roof. Under this shade extends a pleasant promenade. Below the parapet of the pergola the rugged hillside with its wild growths of shrub falls away, and beyond there is a fine view of the surrounding country. Turning within, to the garden itself, there is all the gorgeousness of color which

the debris of building construction having been cleared away, the task of covering the steep surroundings with grass and native shrubs and the planting of the garden was begun. The accompanying illustrations show the grounds in their maturity, when the once bare walls are clothed with greenery and there is in every suitable place a fullness of verdure. The estate is being enriched by the addition of old garden ornaments

from abroad, such as beautiful Roman bronzes, Spanish water jars, stone benches and marble urns. These, however, as well as the scene to which they contribute, cannot be viewed except by entering the estate, for Maxwell Court stands high above the village, where those in the streets see not the garden, but only the house.

ABOUT FIREPLACES

THE fireplace expresses the individual taste of the house owner. It is a keynote of his household life, — of his opinions as well, for there is a rugged truth in rough bricks and a mantel of hewn wood, and such is the hearthstone of democracy. A fireplace lined with ornamental iron, faced with tile and surrounded by a mantel in any old historic style: all this expresses gentility, if not conformity. But it has, nevertheless, much to be said in favor of it. Regard for harmony directs that light colors, either of brick or tile, should compose the fireplace itself, that the mantel be of the same wood as the



THE ENTRANCE HALL

Where the Woodwork is Ivory White and the Walls are a Pompeian Red



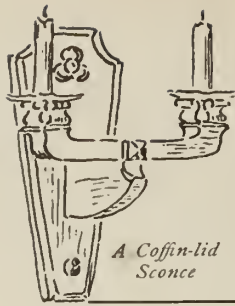
THE STABLE OF "MAXWELL COURT"

trim elsewhere in the room. Iron backs and jambs are indeed the most durable for the inside of the fireplace. For the hearth, either brick or rough

tile should be used. The fire set is more cheerful in appearance if of brass, and if one can afford it, should be of cast brass rather than spun. Bright brass, given a lacquer finish, is far too meretricious for this sturdy purpose. Iron fire sets are dignified, and they require no care whatever.

Doctrinaires of household design affirm that the mantel should be suppressed to a large extent, it should not protrude into or attempt to ornament the room, but should be merely an incident of the interior. Hence, a single shelf has been found effective. This may be enriched to

a high degree, and what is placed upon it expresses again the individual taste of the house owner. It may also be a measure of his good sense.



The Evolution of a Man's Flat

FROM THE BACHELOR APARTMENTS OF TWO ARTIST BROTHERS TO
THE COMPLETE HOME OF A YOUNG FAMILY

By W. J. H. DUDLEY

AS bachelor brothers, working in the arts and living in quarters, our collection of furnishing and fitments had gradually grown as requirements and time had demanded, regardless of conventional lines, and with the sole aim of making a reasonable working studio out of a commonplace room. We did not strain after effects. How could we, where meals were served on the drawing-board when space did not permit of a dining-table? Consequently the "horses" were evolved to serve a double purpose, and to be at least appropriate.

The bookcase had to share honors with the sideboard, and the china closet be provided with secret spaces for color boxes and kindred artists' supplies. A locker settle housed the inevitable accumulation of rolls, sketches, catalogues and unsightly literature, and proved a veritable sanctuary at any hour of the twenty-four.

A wardrobe to frame a piece of tapestry — which in the next camp might pass as a hall fixture — and a compact dressing-case that would not too openly betray its *raison d'être*, all afforded simple but interesting problems in design, and

were executed from time to time with a fixed purpose in view, for each was intended to fill its mission in the country home to be, to which the average man — whether he be artist or artisan — aspires, in order to enjoy the fruit of his labors, his books and collections. Wall cabinets and chests, racks and numerous devices for holding the accumulation of necessary and trivial articles, casts and souvenirs, were devised in due course, as time sped on, till the always possible but never expected happened — the announcement by one of the brothers that he would become a Benedict.

After the smoke of this outburst had cleared away and the inevitable had been accepted, new vistas of development opened up, and plans were made to secure an abiding place where the features of the old studio could be duplicated, and where it should be demonstrated that the perhaps masculine severities in motifs and decoration would be preferable in the long run to the usual formulas prescribed for domestic equipment. So the brothers took it upon themselves, without the assistance of the bride elect, to select and equip a family "flat" which should be lacking in nothing dear to the housekeeper's heart, and the jump from Bohemia to Christendom was to be accomplished simply by the lighting of the range.

The search for an abode was extended and tedious, as those of modest means and fixed ideals have long since discovered such a search is likely to be; but the experience was worth while, as it revealed the visions of hideousness that, under the guise of "decorated suites," are offered to the innocent home-seeker who could plead "not guilty" if better things were offered.

Beginning with the condensed parody on a French salon, only awaiting the glaring furniture to make the horror complete, through the array of bedrooms in assorted styles, embellished with botanical studies in wall papers, and possibly a converted closet designated as smoking-room or "den," to



THE STUDIO SANCTUARY

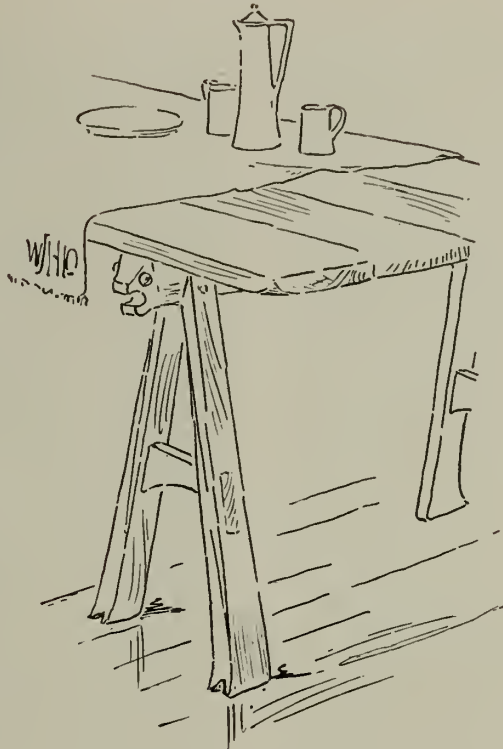
the mediocre red and white or gloomy "Dutch" dining-room, — the recipes were similar, with individual doses of more or less intensity.

To find a remnant of the much-maligned Queen Anne period, with large, well arranged and lighted rooms, was the culmination of many misgivings; and after judicious pruning of the woodwork, comparative simplicity was obtained, and the process of transformation progressed with vigor under a few rules for the general scheme, which, as a whole, was to simulate modest hand work of the bench and loom, and colors suggesting the home-made dye-pot of long ago. Taken in detail, the treatment of the several apartments was as follows, each proving eminently satisfactory for the time and place:

The sleeping cells and bathroom were treated collectively, with painted walls of mustard yellow, dead white trim, and floors stained mottled green, and, according to the improvised sanitary code, were furnished with Puritan simplicity, and all wall ornaments barred out.

To one room were assigned old mahogany pieces, somewhat out of scale, but friends of former days; and if the quaint mirror, with its very painted ship upon a paintfully painted ocean, reflected brick walls instead of green fields, it perhaps felt its imprisonment but temporary.

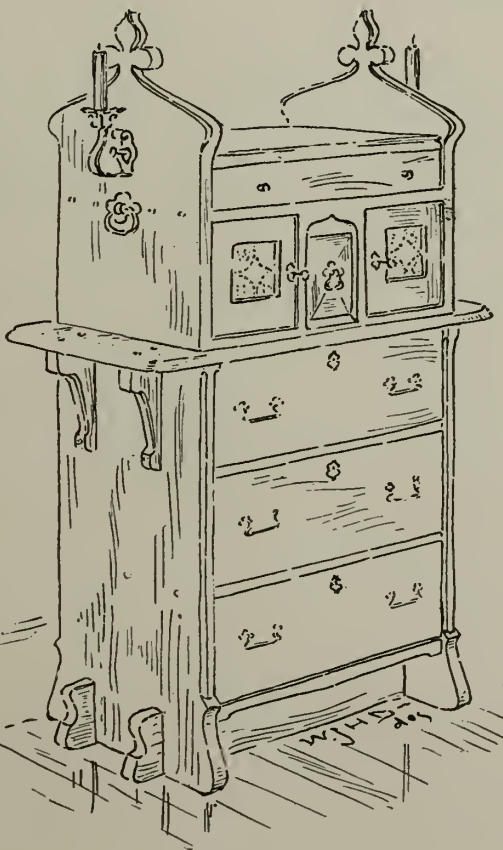
The "monk's" cell, so-called because it was assigned to the remaining bachelor, was furnished in brown and gray, with



THE QUADRUPEDS

trimmed in cherry, was hung in liver-red crepe paper. This met a plain coved ceiling of manila tint, which shaded a little lighter than the clouded yellow tiles of a generous fireplace. A rug of geometrical design in peacock blue, tans, yellows

and browns left a margin of almost black floor, and completed the color scheme, which was rigidly adhered to in minor details as well. The pictures were confined to black-and-whites, the ornaments to Bohemian glass and plain casts with a few small casts, ivory toned; while the two windows, treated as one feature, were festooned with a coarse fish net, old and weather-stained from long usage, with the glass floats pendent against the light. Within this setting were grouped the various studio effects with a few minor pieces of old mahogany and simple willow. The large settle screened one



A CASE OF NECESSITY



TWO VIEWS OF THE STUDIO ROOM

corner and afforded a working retreat for writing table and attendant outfit.

Through the alcove vestibule and hall was carried a dado of red, matching the main room, with walls above of terra cotta on which were grouped color sketches, studies and several fantastic figures in wood and plaster. The iron-mounted linen chest was assigned space near the entrance, and backed against a Herez rug hung on the wall with chains; and flanking this, the transformed wardrobe with cushioned seat became a stopping place in the corridor. Passing the several doorways, each with its hanging formed of old handwoven coverlets of exceptional pattern and colors, and each with its

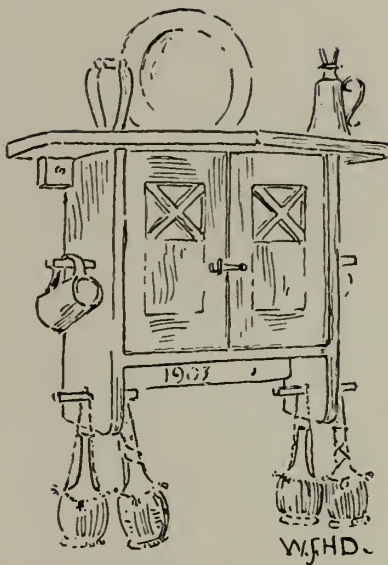
little history or interesting associations, the dining-room was reached.

With brown oak woodwork, symmetrical openings and octagon end, a formal treatment was but natural.

The walls were done in Antwerp blue, above a dado of rough brown plaster, with irregular devices painted on in brick red. A deep frieze of straw color, continuous with the ceiling, formed the background for a line of old Staffordshire plates, and as pictures were eliminated, the wall spaces were given over to casts and metals, the end opposite the fireplace being arranged with a hanging cabinet between a pair of sconces of Circassian walnut and gray iron, filled with yellow candles, as were the



A PART OF THE DINING-ROOM



THE SHRINE OF NICOTINE IN
THE "MISSION ROOM"

other holders about the room.

The window and door hangings were of Hungarian peasant work of corn color and blue linen, heavily fringed, a single length to each opening arranged as border drapery — and a piece of India wax print of block design resembling mosaic was spread over the mantel shelf and screened its obnoxious details.

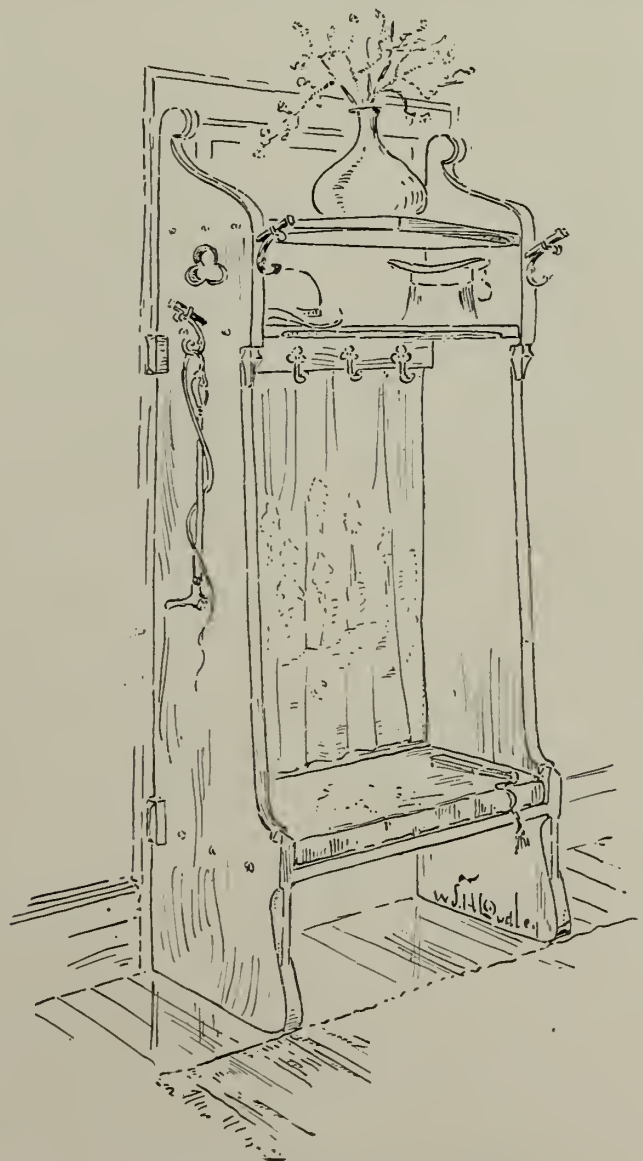
On a floor covering of red and blue, lightened with much yellow, was assembled the peasant-like furniture which had been constructed, treated in gray and sparingly waxed, with coarse seats of the natural rush. It was a foregone conclusion that the few necessary pieces for this place should be representative of the "Mission" style; in fact, should duplicate the first productions which gave impetus to that movement a few years ago, and which later embraced nearly all domestic furnishings and necessitated the revision of wood-finishing methods, as well as the making of new, or revival of, appropriate fabrics and colors to harmonize.

In a properly equipped suite, the much despised or neglected kitchen was not to be overlooked, and it afforded considerable diversion and real interest to anticipate and collect all that the most exacting housekeeper should require, and to arrange it in an appropriate and consistent setting. Although the effort may be considered wasted, there was a satisfaction in knowing that the ordinary utensils of the daily grind were not, of necessity, commonplace, and that even the store closet could be attractive of its kind.

An atmosphere of sage green—after much deliberation—was thought to be acceptable to any human "type" that might be quartered therein, and with a scrubbed and sanded floor, or the theory of it, seemed a good beginning. The limited pieces of furniture of decent form and make were readily obtained and installed.

Junk shops were ransacked for quaint forms in common glass; odd crocks and jugs were selected with much care as to color and texture; wooden ware and cans were artistic in form when a choice was possible, and all grouped on shelves with proper labels, or marked themselves after the fashion of old Delft apothecary jars, and several old relics were added to lend interest to the array.

But alas for masculine foresight and preconceived ideas of comfort! Unmindful of generating discontent, weeks passed, and autumn sketching trips diverted the mind to outdoor thoughts and relaxation. But the climax came upon reaching home after a particularly tedious tramp, when the weary mistress broke the bounds of restraint, as her part of the paraphernalia was deposited on the floor with the exclamation and pathetic looks which spoke volumes, "Oh, sonnie, if we only had a rocking-chair!"



A STOPPING PLACE IN THE CORRIDOR

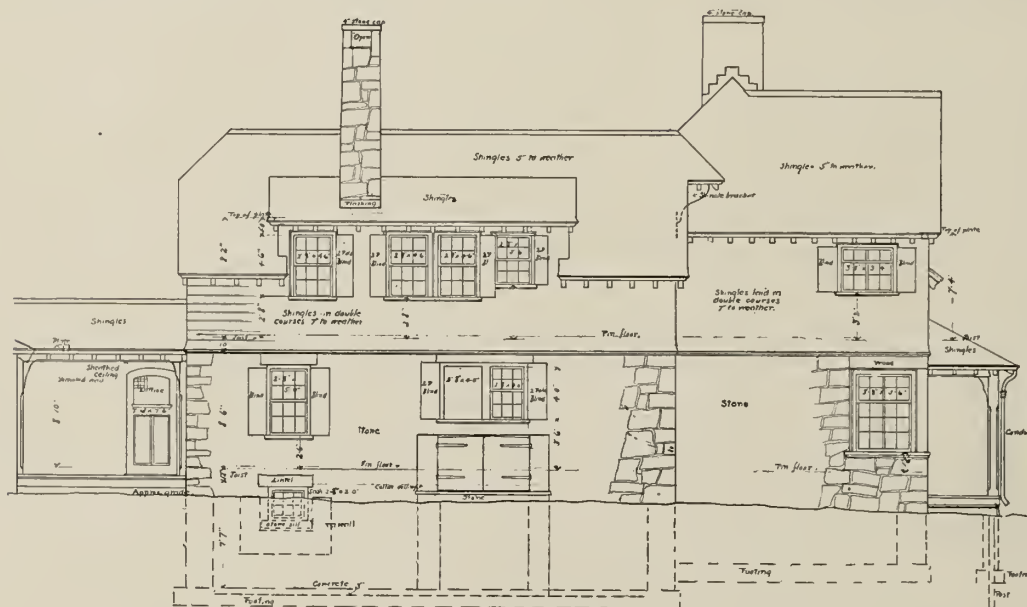
Complete Designs of an Unbuilt House

A SUGGESTION FOR A DELIGHTFUL COUNTRY HOUSE OFFERED TO READERS OF INDOORS AND OUT
BY WILLIAM R. RANTOUL, ARCHITECT

A ROOMY country house for generous entertaining: this is best arranged when it rambles freely over a chosen site and from expansive sides gains the utmost breadth of view. The L-shaped plan, as adopted in the house illustrated, has obvious advantages. It removes the service rooms from the main front of the house; and if these rooms are laid to the north they shelter the remainder. It also encloses on two sides a space where the approaching drive circles before the entrance door.

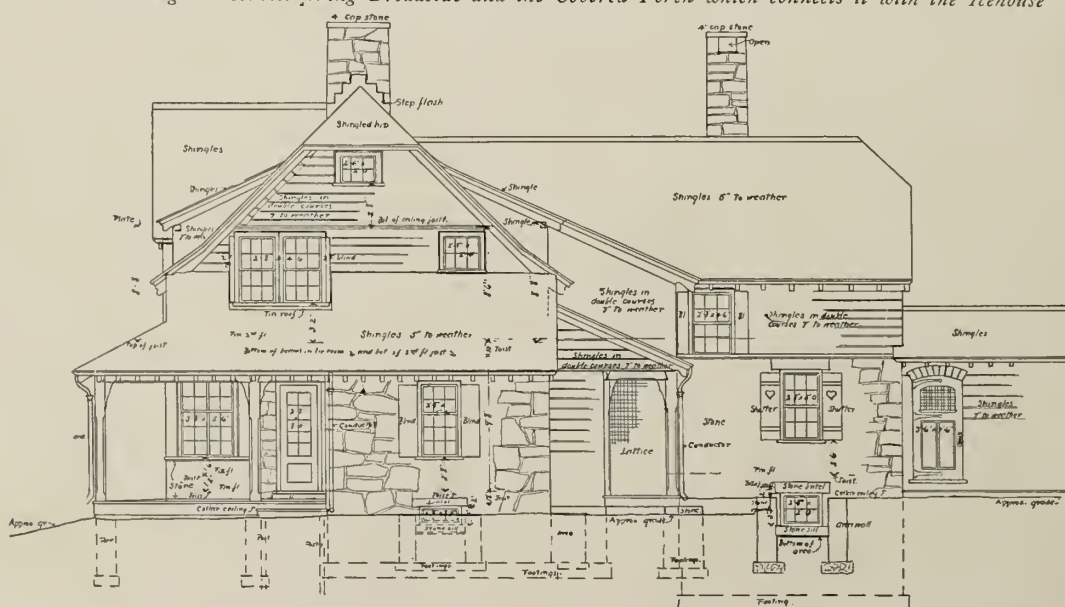
The house is intended to be situated near a river, and the rooms on this side are arranged to have the greatest outlook possible. The living-room opens upon a veranda 45 feet long and 11 feet broad. The dining-room is lighted by windows occupying an entire end. An unusual feature is a guest chamber and bath on the first floor, reached by a narrow passage from the living-room. There is no attempt to make the main stairway a dominating feature of the first floor, as is usually the case. Rather is the

interest of the visitor arrested upon entering, by the capacious ingle-nook, one end of which is enclosed by spindle-work, admitting a glimpse within. The floor of the dining-room, hall and service-rooms is raised two steps above that of the living-room; and this device serves to fit the house against the rising ground that would naturally be found near a riverside. One after the other the serving-room, the kitchen and servants' hall make their way toward the rear, until a covered porch forms a connection with the icehouse. This is after the fashion of north country homesteads, which need in winter to have the rear door protected from wind and snow, and in summer some shade afforded the store of ice located partly in the hillside. The back stairs and the rooms they serve



THE WEST SIDE

Showing the Service Wing Broadside and the Covered Porch which connects it with the Icehouse



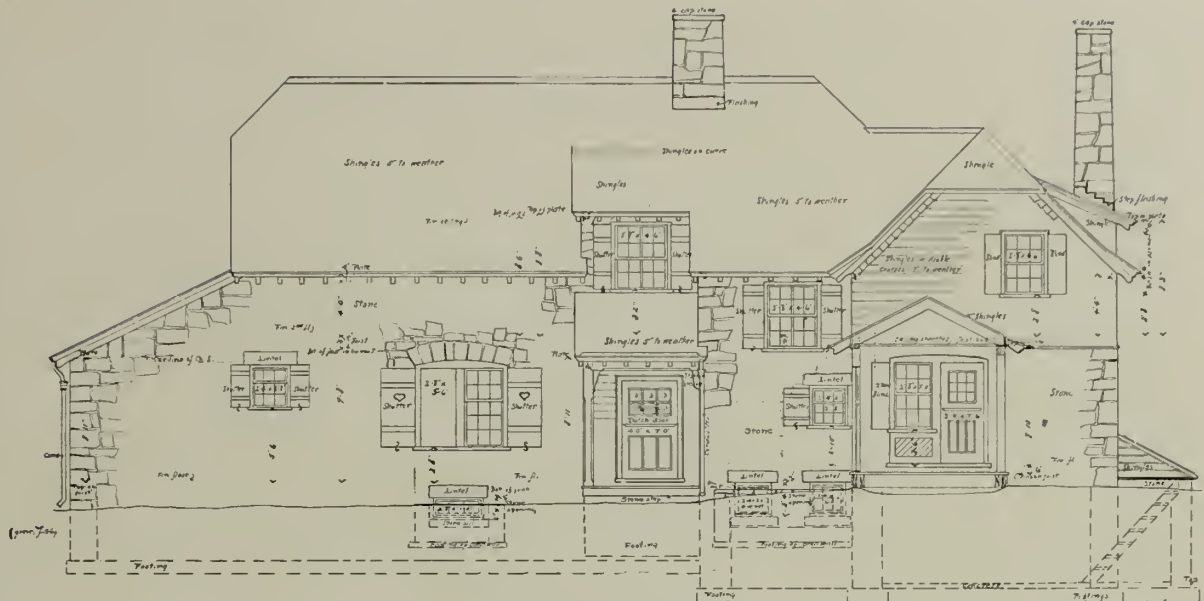
THE EAST SIDE

Showing one end of the Piazza, the First-Floor Guest Room, the Service Wing appearing at the right in the Rear

are entirely independent of the rest of the house save for a single door on each floor. A landing of this stair coincides at one point with a landing of the main stair.

On the second floor a corridor runs along the north permitting the chambers to have the river view. The servants are housed at one end of this floor, and there is no space above except a storage loft. This enables the roof to be unbroken by windows. Its great expanse and the height of its summit, as well as the agreeable forms and graceful terminations, constitute the chief charm of the exterior.

The construction of the house contemplates first-story walls 20 inches thick of local stone and heavily furred on the inside. The limited area of wood wall above this consists of double rows of shingles laid 7 inches to the weather, thus giving an appropriately bold texture to a wall in close juxtaposition with vigorous stonework. No structural steel is needed. The floors are all of wood framing and their surface is to be of maple throughout. The follow-

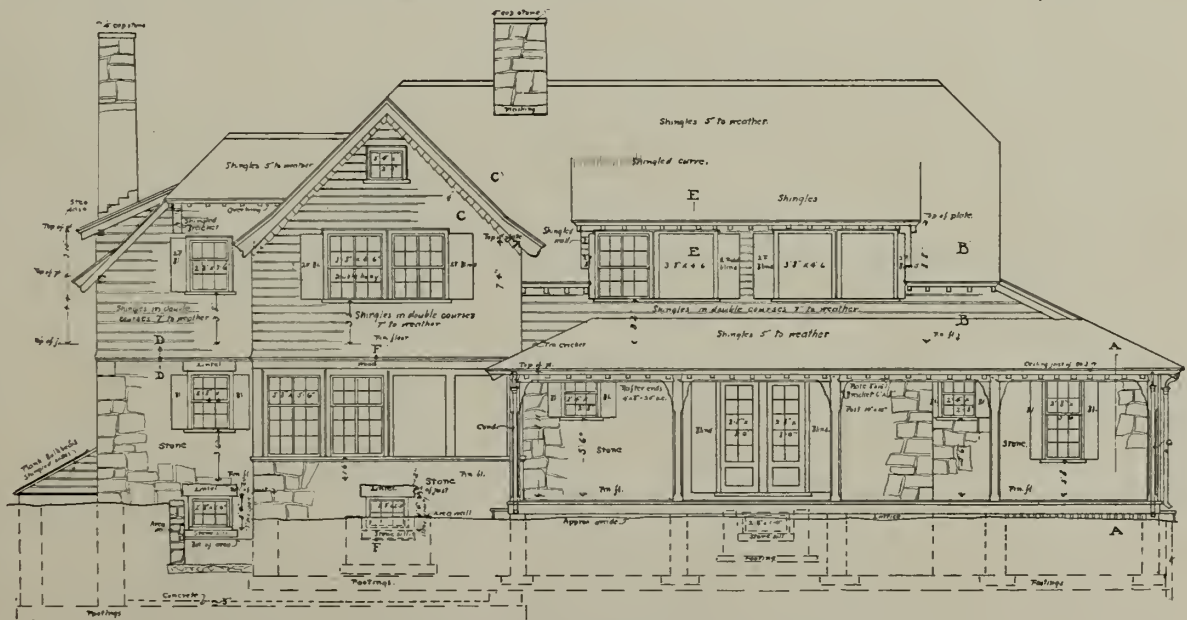


THE NORTH SIDE

Showing the Full Length of the Main Portion of the House, One End of the Service Wing and the Covered Porch in Sectional View

ing table gives the approximate cost of building the house in a country district.

Rough lumber	.	.	.	.	\$900.00
Shingles	.	.	.	.	350.00
Mason work					
Excavation	.	.	.	.	\$300.00
Foundation	.	.	.	.	850.00
Concrete	.	.	.	.	100.00
Brickwork	.	.	.	.	1,000.00
Drains	.	.	.	.	250.00
Stonework	.	.	.	.	2,500.00
					<hr/> 5,000.00
Plumbing	.	.	.	.	1,200.00
Heating	.	.	.	.	500.00
Floors	.	.	.	.	400.00



THE SOUTH SIDE FACING THE RIVER

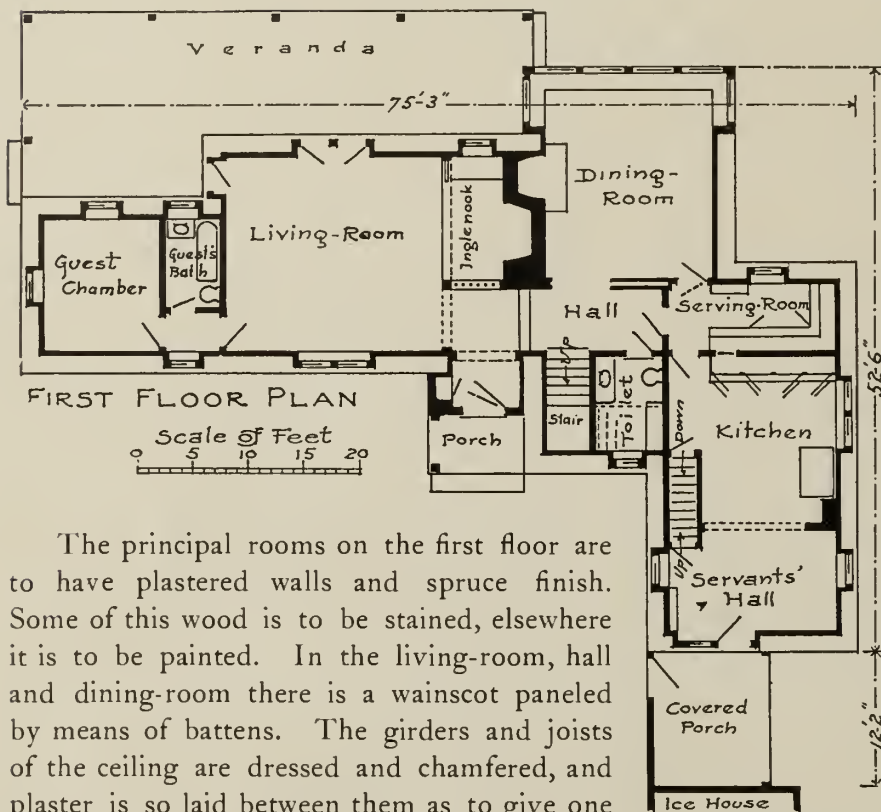
The Principal Façade of the House on which the Important Rooms open and traversed for full half its length by the broad Piazza

Inside finish	\$900.00
Outside finish	600.00
Painting	750.00
Stairs	175.00
Plastering	900.00
Labor	2,000.00
Hardware	250.00
Nails	50.00
Electric work	75.00
Conductors	75.00

\$14,125.00

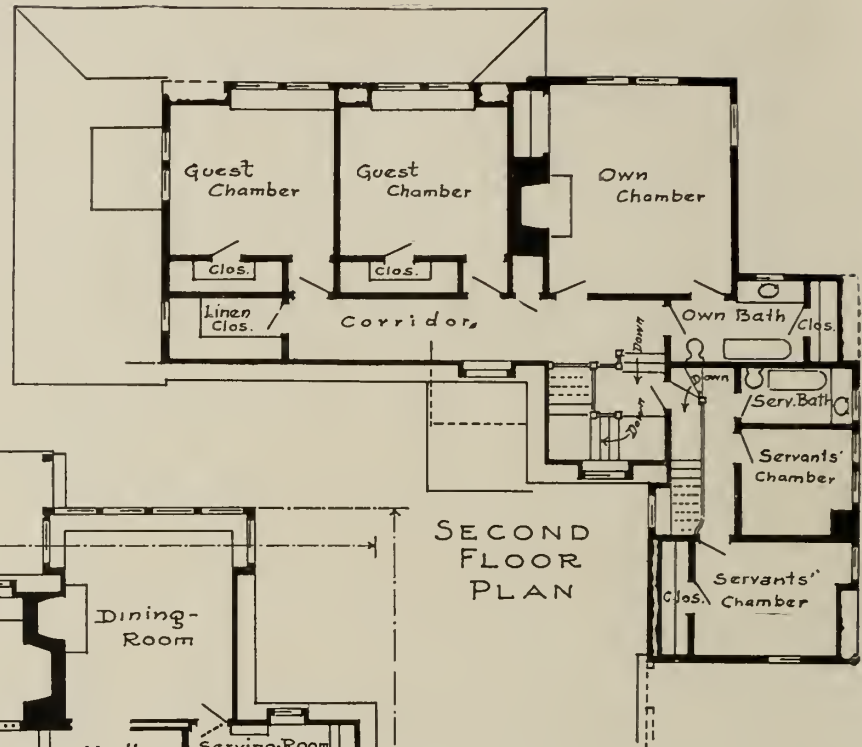
Contractors' profit of 10 per cent 1,412.00

\$15,537.00



The principal rooms on the first floor are to have plastered walls and spruce finish. Some of this wood is to be stained, elsewhere it is to be painted. In the living-room, hall and dining-room there is a wainscot paneled by means of battens. The girders and joists of the ceiling are dressed and chamfered, and plaster is so laid between them as to give one inch clear air space below the double flooring of the second story. Hearths on the first floor are to be of brick, the mantel facings of limestone. On the second floor the entire fireplace is to be built of brick. The house is to be heated by one hot-air furnace.

There are several ways in which the cost could be reduced and yet the general character of the house be preserved. It could be built wholly of wood, and such a substitution for masonry would materially lower the item of \$5,000, for there would only remain the foundations to be built of stone, brick or possibly concrete. The interior finish could be simplified and cheapened with little sacrifice of effect and comfort; the floors, for example, could be of a less expen-



SECOND FLOOR PLAN

sive wood than maple, and the wainscoting might be omitted.

A condensing of the plan is another method by which the initial cost, at least, could be lowered, and at some future time the parts now discarded might be restored. Among such changes might be the omission of the servants' hall and condensing the back stairway so that two small rooms for servants could be comprised in the second story of the shortened wing. The omission of the guest chamber on the first floor is another change which, though undesirable, for the reason that it shortens the base line of the main portion of the house, might be made at the outset, if economy were an insistent consideration.

Such curtailment of the ground area of the house, however, would have to be made with care, in order to retain the agreeable proportions of the exterior. The secret of these proportions lies in the extent to which the house stretches laterally over the site compared with the height of the walls and the roof. If the former were reduced, the latter would have to be dealt with similarly. Ceiling heights, which are now 9 feet 8 inches and 8 feet 6 inches on the first and



PERSPECTIVE VIEW OF THE UNBUILT HOUSE

second floors respectively, would easily submit to such a change.

Another method of curtailment would be to contract the house proportionately in every dimension,

thus preserving the design as it now appears. Indoors the area of rooms would be reduced at the same time as their height. Their present area is sufficiently liberal to render such changes feasible.

A Modest Cottage built of Wood

AT FRAMINGHAM, MASSACHUSETTS

RALPH E. SAWYER, ARCHITECT

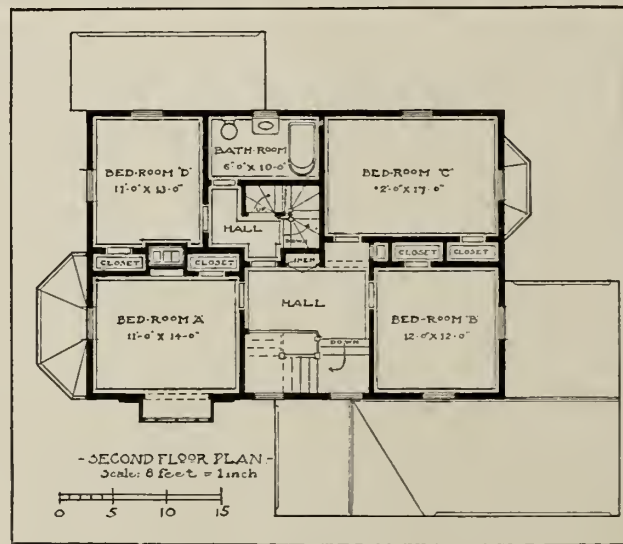
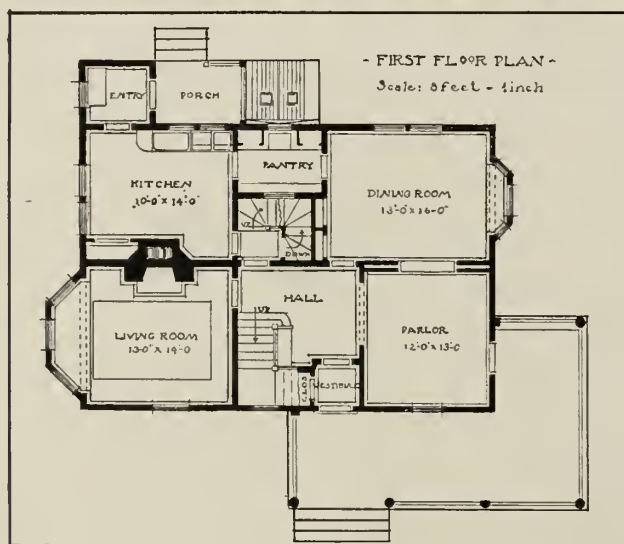
A CONSIDERATION which prevents the planning of a house to wholly meet the individual taste of the man who builds it is the contingency of having sometime to dispose of the property. In order to avoid financial loss in such a case, some established customs in house building must be followed; for, only by the observance of these does the house address itself to the largest number of possible purchasers.

The cottage at Framingham embodies certain reasonable conventions, yet without sacrifice of individuality. It stands well to the front of the lot upon the building line adopted by its neighbors. The piazza faces the front street and, by virtue of projecting at the right, it views the garden also.

The house measures, over all, only 27 by 39

feet. It is entered through a vestibule, which leads into a square hall, opening by a wide arch to the parlor or reception room on the right. At the left, a narrower opening leads to the living-room, which has an outlook on both the front and side streets. The kitchen, pantry and dining-room extend across the rear, and it is from a window in the pantry that the back stairs, located in the center of the house, are lighted. The hall stairs and some of the floors are of oak, while the interior finish in most of the rooms is of white-wood and cypress.

In the second floor a row of closets is directly over a line of partitions below, and otherwise the divisions of the house on the first floor are nearly duplicated above. This, of course, insures stability and economy of construction.



PLANS AND GENERAL VIEW OF A MODEST COTTAGE BUILT OF WOOD

The exterior design sprang from a desire to avoid a too rigorous simplicity of a style used by our Colonial forefathers, and also from the need of adequately expressing a sense of shelter and comfort, which all true homes should possess. The rather wide overhanging cornice and verge boards drooping close over the second story windows, as well as the broad roof to the low porch,

help to produce this effect. The walls are of cypress siding exposed eight inches to the weather and painted white. The blinds are painted a soft green, and above all is a roof of dull red slate. In its straightforwardness, the little white cottage embodies many of the cherished traditions of New England houses, yet it is without the severity and bleak aspect of some of the old landmarks.

Old Williamsburg To-day

A VIRGINIA TOWN CONTAINING INTERESTING REMAINS OF THE COLONIAL PERIOD

By E. N. VALLANDIGHAM

FEW American towns of twenty times Williamsburg's population have half so many survivals of Colonial days. The town of to-day, indeed, is mainly new and commonplace, but even the three or four hundred houses under fifty years old that shelter most of the inhabitants can not blind one to the charm and interest of perhaps two score buildings four or five times as old. What other town has for its main thoroughfare such a name as Duke of Gloucester Street? To be sure Duke of Gloucester Street is a dusty Sahara in summer, a slough of despond in winter; but it is dominated by the loveliness of the simple but beautifully proportioned Bruton Church, it contains the admirable old Colonial courthouse and it leads to William and Mary College.

It was an Italian nobleman visiting his grandmother, Mrs. Paradise, at Williamsburg, who exclaimed at sight of the little city's assembled beauty, "How can such angels live in such hovels?" Williamsburg of to-day is a little puzzled to understand this odd reference to the dwellings occupied by their ancestors of the eighteenth century, but any one who knows aught of English domestic architecture fitted to Colonial needs, as compared with the more formal splendors of Italian palaces, can well understand the young nobleman's exclamation.

The survivals of Colonial architecture at Williamsburg, indeed, are, on the whole, less pretentious than those remaining at Annapolis, and there is hardly a dwelling at the old Virginia capital equal in dignity and elegance to the larger Nelson House at Yorktown. The older dwellings at Williamsburg have homely charm rather



THE POWDER HORN AT WILLIAMSBURG
*Built as a Magazine early in the Eighteenth Century
It is now a Museum.*

than special dignity, and hardly one of them deserves to be called splendid.

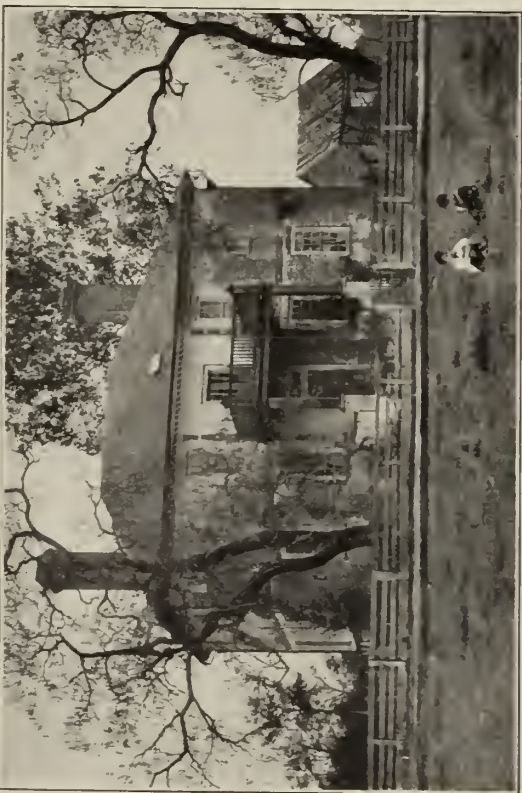
One of the oldest and most distinguished private dwellings in Williamsburg is the Wythe House in Palace Street, not far from Bruton Church. It is an ivy-clad, Colonial structure, of brick, rectangular in form, extremely simple in outward aspect, but roomy and dignified. Here lived Chancellor George Wythe, whose duty it became, in 1776, to revise the statutes of Virginia. He it was who devised the seal of the

state, with its motto, forever memorable in the mouth of John Wilkes Booth, a moment after he had assassinated Lincoln.

The Peyton Randolph House, once owned and occupied by the first president of the Continental Congress, is to all outward appearances a modern structure upon rather familiar Colonial lines. It is of wood, with a somewhat insignificant porch, and two wings to the main structure.

More impressive, and one of the greatest of the surviving Colonial dwellings, is Bassett Hall. According to tradition, the first ailanthus trees brought to America were planted in the garden of this house. Here, too, it is said, Thomas Moore first saw the firefly and composed his little poem on the insect. Bassett Hall was once the home of perhaps the unhappiest of American presidents, John Tyler. The place still has its old-fashioned flower garden occupying a considerable space in front of the house.

The Blair House, in Duke of Gloucester Street, looks like an enlarged model of a simple burgher's cottage in any little Scotch town. It is a long, low structure of wood with secretive



THE WYTHE HOUSE
Sometime the Residence of a Chancellor of Virginia



THE OLD CUSTIS HOUSE
Interesting by its Relation to the Life of George Washington



BASSETT HALL
Where President Tyler once lived



THE BLAIR HOUSE
Where Two Chief Justices of the United States have resided

dormer windows in the roof which forms the second story. These windows, placed at irregular intervals, seem to wink significantly at the passer-by as if they held some humorous secret of forgotten days. Its interest for us of to-day lies not in its architectural quality, but in the fact that it was occupied by two justices of the United States Supreme Court, once by Justice John Blair, and once by Chief Justice John Marshall. It was probably during Marshall's occupancy of the Blair House that occurred the familiar incident of the Chief Justice's carrying home from market the turkey

which his exquisite young neighbor was too proud to shoulder. The house and the incident both go to suggest a simpler mode of life in Williamsburg than some of its traditions might seem to indicate.

The truth seems to be, that when Williamsburg ceased to have what the inhabitants of to-day proudly describe as a "vice-regal court," it tended to take on the aspect of a simple village. A fine tradition of education and elegance remained, but the domestic architecture, perhaps never splendid, took on merely an air of simple comfort. George Washington passed his honeymoon here in a house now vanished, but described in local tradition as a "stately mansion." The only building that remains as a reminder of the Washingtons is a simple, single-story brick house in semi-ruinous condition, known as "Martha Washington's Kitchen."

Of the other older and locally famous houses, Tazewell Hall is one of the largest, though it is gaunt and angular in outward aspect, with a double porch which seems too small for the great stretch of the front. It was the Colonial home of Sir John Randolph, and of his nephew, Edmund Randolph, famous in Virginia and national politics. A simple but beautiful cottage is



OLD BRUTON PARISH CHURCH AT WILLIAMSBURG

In which Five Presidents of the United States have worshipped. Supposed to be the Oldest Episcopal Church in continuous use anywhere in the United States

the Cary House, where George Fairfax of the Lord Fairfax family, wooed Sarah Cary. The Paradise House is an uncompromising chunk of glazed brick, severe in outline, but comfortable within. Doubtless it was this studiously simple piece of Colonial domestic architecture that led the Italian grandson of Mrs. Paradise to exclaim at the contrast between the ladies of Williamsburg and the dwellings that sheltered them.

Surviving public architecture of the Colonial period at Williamsburg is marked with simplicity that characterizes most of the domestic structures. Williamsburg is disposed to believe that Sir Christopher Wren designed several of her public buildings; but it seems that the main structure of William and Mary College is the only one certainly designed by the builder of St. Paul's, and even in this instance his plans were modified. Jefferson, whose taste in architecture was unimpeachable, described the college as a rude, misshapen pile, which, but for its roof, could hardly be distinguished from a brick kiln. Those who see the college building of to-day find it a little gaunt, and far from thoroughly well proportioned, but not uninteresting. Here, as elsewhere in Williamsburg, the woodwork is good, and the subordinate buildings of the college have an air



The President's House



Brafferton Hall

BUILDINGS OF WILLIAM AND MARY COLLEGE

of sober strength and solid age, that puts to shame the splendors of some of our new university buildings, "white from the mason's hand." The president's house on the college campus is a solid, rectangular building of glazed brick with a peaked roof, and a pleasing porch of sufficient size. As an example of Colonial brickwork, it is hardly to be surpassed in its kind. The interior is dignified, with large rooms, high ceilings and tasteful woodwork. It is far inferior to the Nelson House at Yorktown in the sort of urban dignity that distinguishes that unique mansion, and its whole aspect suggests the work of men who hardly knew how to build ill, but who built with a wise economy always in mind. The original house was built in the very year of George Washington's birth, but was accidentally burned to the ground by our French allies during the Revolutionary War. In consequence of this accident, Louis XVI rebuilt the house with money from his own privy purse, and the structure thus built is that of today.

A close counterpart to the president's house is Brafferton Hall, also within the campus, originally built about the end of the seventeenth or the beginning of the eighteenth century, as an Indian school. Brafferton Hall is now a dormitory. Here is the same compact and unadorned simplicity, the same well-laid glazed brick, with sharp lines and checkered pattern, the same sufficient porch, the same pleasing woodwork, as in the president's house.

Strangely at odds with the grave simplicity of the substantial college buildings is the statue of Lord Botetourt, with its beautifully ornate pedestal standing in front of the main structure beneath the great elms of the campus. Botetourt was the royal governor of Virginia from 1768 to

1770, and this statue was erected to his memory by the Virginia House of Burgesses in 1774. The inscription on the pedestal declares the statue erected in honor of "The Right Honorable Norborne Berekley Baron de Boteourt, his Majesty's late Lieutenant and Governor-General of the



THE COURTHOUSE AT WILLIAMSBURG

Colony and Dominion of Virginia." His Lordship's simulacrum is unmistakably bandylegged, and time has deprived it of the august nose that no doubt once adorned the marble, but the work is interesting as an unusual bit of artistic portraiture.

Bruton Church is in some respects the gem of Williamsburg's public buildings, though here as elsewhere in the old capital, simplicity and restraint rather than grandeur are the things aimed at. Williamsburg likes to recall that five presidents of the United States have worshipped in Bruton Church. It is said to be the oldest Episcopal church in continuous use anywhere in the United States, and it is the immediate descendant of the mother church at Jamestown. The present structure, cruciform, with the entrance at the simple square tower over which rises a charmingly graceful wooden spire, dates from 1715. It was designed by the Governor Spotswood who founded the Order of the Golden Horseshoe in memory of his journey of exploration across the Blue Ridge, significant as a premonitory movement of American expansion. The brick walls of the church are beautifully well laid, and its excellent proportions and lovely spire give it a deliciously serene beauty. Its street wall helps the effect, and all its woodwork is of the most pleasing character. A dense growth of ivy, clothing much of the church and of the street wall, lends charm, and the highly decorative character of several of the tombs in the yard introduces a note not strictly in keeping with the structure itself, but not unpleasantly discordant. Some cautiously executed restorations have just been finished.

Beautiful in proportions, and in the simple excellence of its brick and wood, is the Courthouse, now nearly one hundred and fifty years old. The portico, which perhaps once had pillars, and the cupola are excellent in design and proportions.



THE HOUSE OF PEYTON RANDOLPH
The First President of the Continental Congress

The Powder Horn, built in the early part of the eighteenth century as a magazine, and now occupied as a local museum, though interesting for its brickwork, is without architectural pretensions. The same is true of the so-called Debtors' Prison. The old buildings of the Eastern State Insane Asylum have no special charm of outward aspect, and in rebuilding the main structure, about twenty years ago, the authorities seem to have forgotten in great measure the tradition of eighteenth century proportions.

Old Williamsburg for the chance visitor is at first sight lost amid the modern town. It is only after a stay of some time that he begins to feel strongly the lingering eighteenth century atmosphere. Once the feeling takes possession of him, however, he is fully awake to the sweet charm of lovely old Bruton Church, to the simple excellence of the Courthouse, to the quaint sturdiness of the Powder Horn, to the uncompromising solidity and rectilinear dignity of the college buildings. The place is best seen when the leaves are on the trees, for while some architectural effects are then concealed, others are heightened, and the old dwellings in particular take on a special and gracious charm as they peep out from their shrubbery.



Flower Festivals of the American Riviera

ANNUAL EVENTS WHICH HAVE BECOME AN INSTITUTION OF SOUTHERN CALIFORNIA LIFE

By WALDON FAWCETT

THE floral fêtes held annually in Southern California probably constitute the most interesting, as they easily do the most spectacular, feature of life in this semi-tropical paradise. Patterned after the carnivals of Southern Europe, these mid-winter festivals of the "American Riviera" surpass in splendor and magnitude all the fantastic frolics of their Continental prototypes. Indeed, these "Tournaments of Roses," as they are generally denominated, are now counted upon as the chief magnet to draw millions of winter and spring visitors from less kindly climes to the south Pacific Coast.

Originally, floral carnivals were held in only a few towns in Southern California, but the popularity of the idea spread rapidly and has been adopted in one form or another, by almost every community that aspires to rank as a tourist Mecca. In many essentials, however, these holiday celebrations are much alike. Invariably the principal feature of the programme — no matter whether the carnival continues but one day or several days — is a great floral pageant in which schools, clubs and individuals take part.

The presence of the human participants is but incidental, however. The real interest of the occasion centers in the blossom-laden vehicles which embody pretty nearly everything that runs on wheels, and, for that matter, one recent parade included a blossom-encrusted sleigh. These posy-bedecked equipages are arranged in divisions under such classifications as tally-hos, automobiles, pony carts, etc., and prizes are awarded for the most effectively decorated entries in each class. Supplementary to the floral



THE HERALD OF THE CARNIVAL

pageant there is usually a programme of sports, mayhap including such novelties as exciting chariot races — a form of contest that is much in vogue in the Land of Sunshine.

It was less than a score of years ago that the idea of the floral fête first had its inception in Southern California. The "Tournament of Roses" at Pasadena, which is commonly accounted the pioneer of its kind, grew out of the annual entertainments of a local hunt club. The

original idea was to evolve a combination of fête, fiesta and tournament to fittingly celebrate, with a touch of the poetic, the ripening of the orange, which occurs in this region early in the year and is an event of no inconsiderable moment to permanent residents and tourists alike.

The Californians frankly admit that they derived the basic idea of their carnivals from the Battle of the Roses, held annually in Rome, Italy, and from the other similar festivities that are characteristic of the morning of the year in Southern France, but it is claimed, and with good cause, that the perfected California spectacle, as seen in this day and age, surpasses in many respects the corresponding merry-making on the shore of the Mediterranean. For one thing, the Californians imparted a unique touch to their carnival by the introduction of old Spanish and Indian games derived from the fiestas held at the missions of the Southwest centuries ago, and other novelties have been conjured up to make the events distinctive.

In most California cities where the annual floral fête is a regular institution the great open air entertainment is under the management either of committees appointed by local boards of trade

and chambers of commerce or else of regularly organized tournament associations maintained, as in the case of the Mardi Gras organizations at New Orleans, simply to conduct these yearly free shows. The funds necessary to call into being these great panoramas of color—and the expense is considerable—are procured largely by popular subscription, and a carnival is no sooner over than its promoters begin to prepare for the succeeding year. The people of the Golden Gate State have the boon of an assurance of fair weather for these pageants prepared for Eastern guests, but there have been one or two instances during the past two decades when a chill wind compelled the feminine participants in the parade to add, at the last minute, impromptu sleeves to their costumes.

Time-honored tradition prescribes that each tournament procession shall be headed by a mounted herald. This courier is costumed after the fashion of the English heralds of the Elizabethan period with hat and cloak of red and white velvet, white tights and riding boots. From his hat hangs a sweeping plume, and on his breast, woven in gold, is the insignia of the city in whose honor the carnival is given. This herald is attended by half a dozen trumpeters, riding abreast on decorated horses and at street intersections the cavalcade is halted while a warning bugle blast is given.

To attempt to convey an idea of the infinite variety of vehicles included in one of these carnival displays would be a hopeless task. Beauty is the keynote of the whole project, and one creation vies with another in the wealth of its floral ornamentation and the ingenious manner of its arrangement. Of late years tally-hos and automobiles have been especially popular

with carnival participants from the very fact that they lend themselves to quaint conceits in decoration. As indicative of the lavish expenditure of petaled riches in this cause it may be cited that more than twenty thousand violets were used in the ornamentation of a six-in-hand that captured a prize at a recent carnival, whereas, in the embellishment of another tally-ho there were utilized fully thirty-five thousand geraniums.

An effort is made to have every appointment of the floral parade in keeping with the implied daintiness of a floral spectacle. White horses are utilized by every participant who can obtain such steeds, and grooms, footmen, postilions and outriders are usually garbed in white from head to foot. Finally, white harness is accounted a proper adjunct, and nine-tenths of the members of the fair sex who crowd the carnival turnouts are in snowy toilettes.

As has been mentioned the success of a flower festival—in comparison with its predecessors and others of its kind during the current season—is largely determined by the presence of novelties in the parade, and naturally, therefore, the promoters of such shows tax their wits to provide innovations that will excite the wonder and admiration of spectators. In this sphere the automobile has proven of incalculable assistance since the average self-propelled machine affords



A SIX-IN-HAND DECORATED WITH 20,000 VIOLETS



A PRIZE-WINNING TURNOUT OF ONE OF THE FLORAL PAGEANTS



THE QUEEN OF THE TOURNAMENT OF ROSES AND HER COURT

an admirable moving platform for a float of almost any description. In a recent fête a large touring car was transformed into a royal barge of flowers for the queen of the tournament and her maids of honor, while one of the

familiar type of sight-seeing autos served as a foundation for a floral battleship a dozen yards in length in the construction of which there were employed upward of one hundred thousand blooms.

A Comfortable and Attractive Seashore Cottage

THE PROPERTY OF MRS. ELIZA F. TRAINER AT VENTNOR, NEW JERSEY

CHARLES Z. KLAUDER, ARCHITECT

THE conditions of building at the seashore are such that, when rightly understood and skillfully handled, the most fortunate creations, from the architectural point of view, should result. Yet seashore architecture, it must be confessed, is, here and abroad, the worst architecture, — a fact that at first suggests that a desire for beauty in one's home and the responsibility to make it attractive for the community is abandoned upon building beside the sea. Rather it must be believed, however, that the architectural contortions which mar the seacoast are the result of ignorance or indifference on the part of house owners and the carelessness of architects.

In view of the great number of seashore villas flaunting their vari-colored and ugly-formed exteriors, it is a pleasure to come upon a certain cottage built on the New Jersey coast below Atlantic City, and illustrated hereunder. Its gray-shingled form is dignified, yet neither forbidding nor gloomy, and an ingenious plan contributes many advantages usually unknown to seaside villas.

There is a large piazza, where the owner and visitors congregate undisturbed and overlook the Speedway which parallels the strand. Callers arrive at the side; and entering the house, they first view the living-room, where they are con-



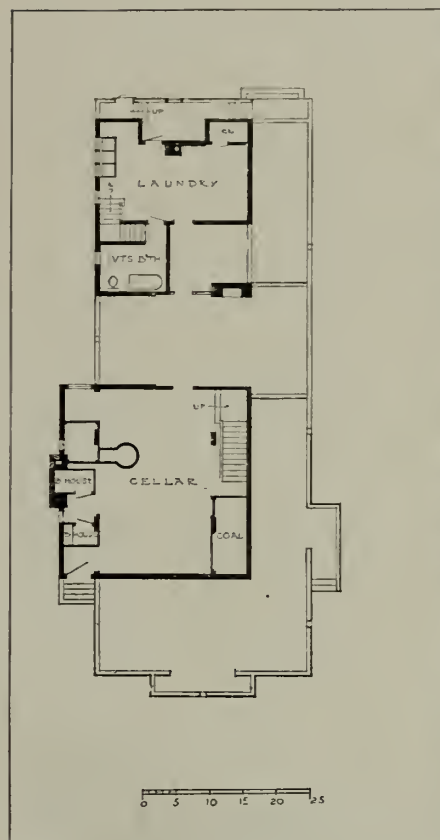
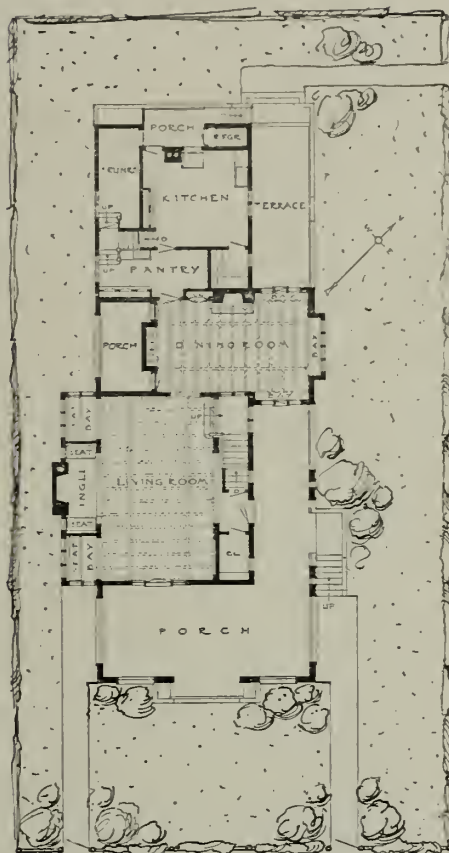
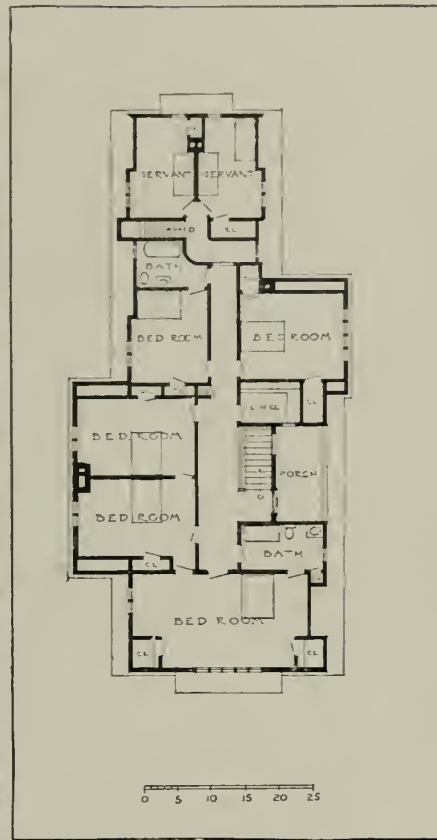
EXTERIOR VIEW OF THE COTTAGE AT VENTNOR



The Living-Room and its Ingle-Nook
 INTERIORS OF THE COTTAGE AT VENTNOR
Showing Effects of Tinted Plaster and Light Stained Chestnut



The Dining-Room
And One of its Three Doorways to the Verandas

*The Basement**The First Floor and Grounds**The Second Floor*

FLOOR PLANS OF THE COTTAGE AT VENTNOR

fronted with an inglenook with a rough brick fire-place and bright alcoves upon each side. The dining-room is found to be of symmetrical shape, with a wide bay which admits the morning sun. There are exits to three piazzas and windows open on four sides. These two rooms are finished in the same style. The small area of plaster wall, forming a frieze, is tinted a light color by an application of permanganate of potash, followed by a coat of wax. The latter, being rubbed down, gives a surface without sheen, and there remains only the solid beauty of the wood to which it has been necessary to add but few moldings. A pantry and kitchen, a trunkroom and kitchen porch, complete the first floor.

The presence of piazzas made it possible to provide a commodious story above, where no less than seven large bedrooms have been devised over the three rooms below and in the roof, which descends snugly. Thus, excrescences in the form of numerous bay windows, gables or dormers, have been avoided. At the same time, each of the rooms in the second story has an ample outlook, and on account of the position of the interior doors satisfactory draughts of air. The

windows are of the casement form, and as they open in pairs outward, at least one sash can be set at such an angle as to deflect the wind indoors from whatever quarter. The mosquito screens swing inward. Two bathrooms, necessary closets, and that very convenient feature, a second-story porch, give the house the comforts of a permanent home.

The foundation consists of a 9-inch continuous brick wall 18 inches deep, upon which the wall studs are set, the entire superstructure being of wood. Under the living-room is a cellar reached directly by a stairway from above. In this cellar are the bathhouses used by the family, and an outside basement door gives access directly to the beach.

The complete finish given to the house by the architectural arrangement takes the place of much furniture which would otherwise be needed, so that in the building of the house the furniture has in a measure been included and the transporting of it to the shore in summer is rendered in large measure unnecessary. Built about three years ago, the house cost \$9,000.

A Bit of "Spotless Town"

COMPRISED IN A BLOCK OF MEDIUM-SIZED HOUSES LAID OUT IN ACCORDANCE WITH MODERN IDEAS

A LITTLE colony has been discovered in Brooklyn, N. Y., which, from its resemblance to the pictures of the mythical "Spotless Town," is familiarly known by that name. It is off the beaten path in a city of residences, among which it forms an interesting and unique feature. The little town consists of a group of thirty-eight small houses, which were built by the Pratt estate, adjoining the Pratt Institute, a center of philanthropic activity that has become famous throughout the country. The immediate environment, therefore, is one of refinement and progressive energy, as many of the houses are occupied by instructors and students.

The designer of these buildings was given an opportunity to produce a harmonious result which is unusual, as dwellings of such a good class are not often erected so many at a time. A comprehensive scheme, with dignity, simplicity and economy in view, was adopted. The houses are planned to suit the requirements of people of taste and refinement, but of moderate means.

The most unique feature probably is that all the houses are heated by steam from a central plant. It is also so arranged that this heat is utilized to provide a plentiful supply of hot water. Thus each tenant has every advantage which is gained by living in an apartment (except that he has not all the living-rooms on one floor), and in



THE SERVICE ENTRANCE TO THE BLOCK



ONE END OF THE BLOCK OF HOUSES

addition, he has the feeling of individuality induced by the exclusive use of a house. Think of the joy of living in one's own house, where there is no such thing as a furnace or boiler to take care of and where coal gas is unknown.

But that is not the full extent of the happiness enjoyed by these fortunate tenants. They are provided with the best-known modern gas ranges, so that they do not have to bother with coal at all, and cigar

ashes are the only kind with which the housekeeper has to contend. Think of a really clean cellar. These are the only ones which I have ever seen (with the one exception of my aunt's, which she has a mania for dusting), and I have seen many. They are light and well ventilated and are used for storage or workshops.

Another interesting feature of this little town, which has proved successful and popular, is that all supplies are brought directly to the back door by means of an alley wide enough to accommodate wagons of any description. All garbage and refuse is also removed in this manner, and there is no access to the cellar from the front of the house. In fact, there is never any necessity for wagons belonging to butcher, grocer or scavenger to be seen standing in front of the houses, and likewise the unsightly nuisance occasioned by rows and rows of ash barrels and garbage cans standing on the curb. I say "standing," although one often sees the can upset and the contents strewn on the ground, the work, possibly, of mischievous boys or hungry dogs.

For the best of reasons, then, this little colony is called "Spotless Town," and the idea was so popular that every house was rented long before completion, and there is now a formidable looking waiting list. The success of the undertaking reflects great credit upon the sons of the late Charles Pratt, who have inherited all of their father's practical ideas and energy, and who are tireless in their devotion to the development of the great philanthropic undertakings which he planned and started. W. A. H.

A MISER TO HIS PHYSICIAN:

"How, doctor, can I live three weeks without eating?"

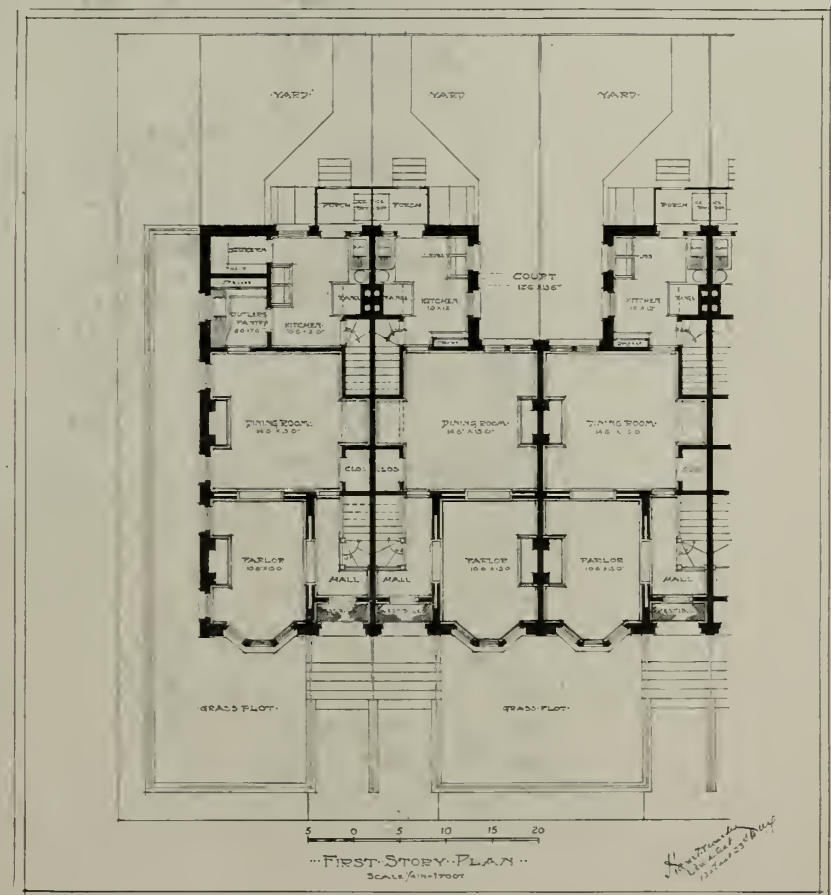
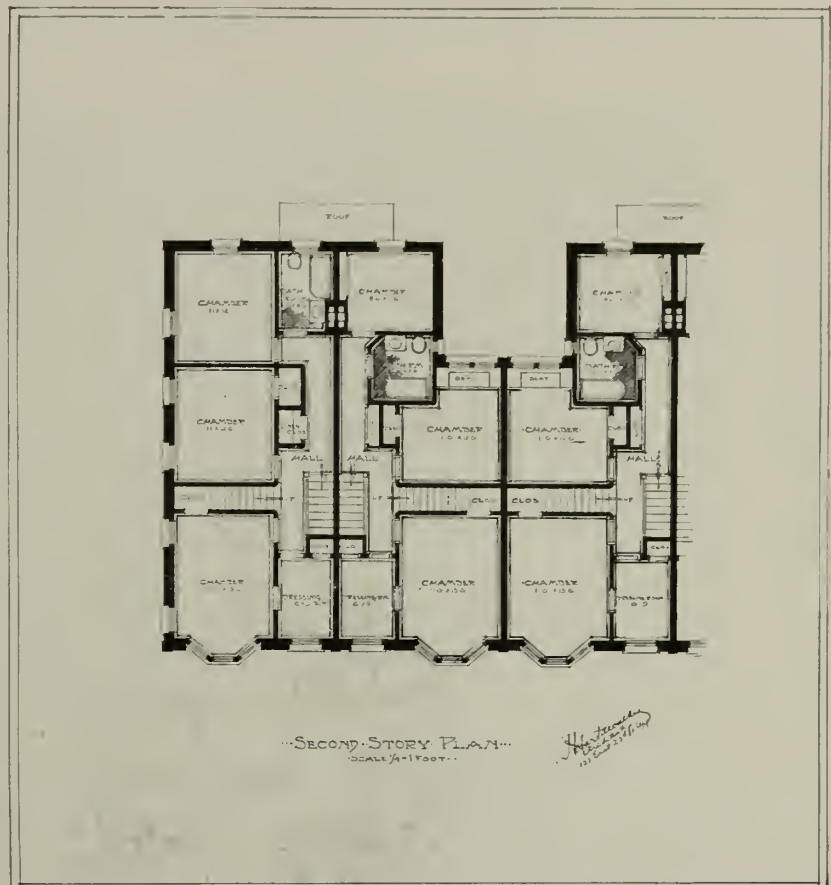
"The fever nourishes," replies the doctor.

"Is that so?"

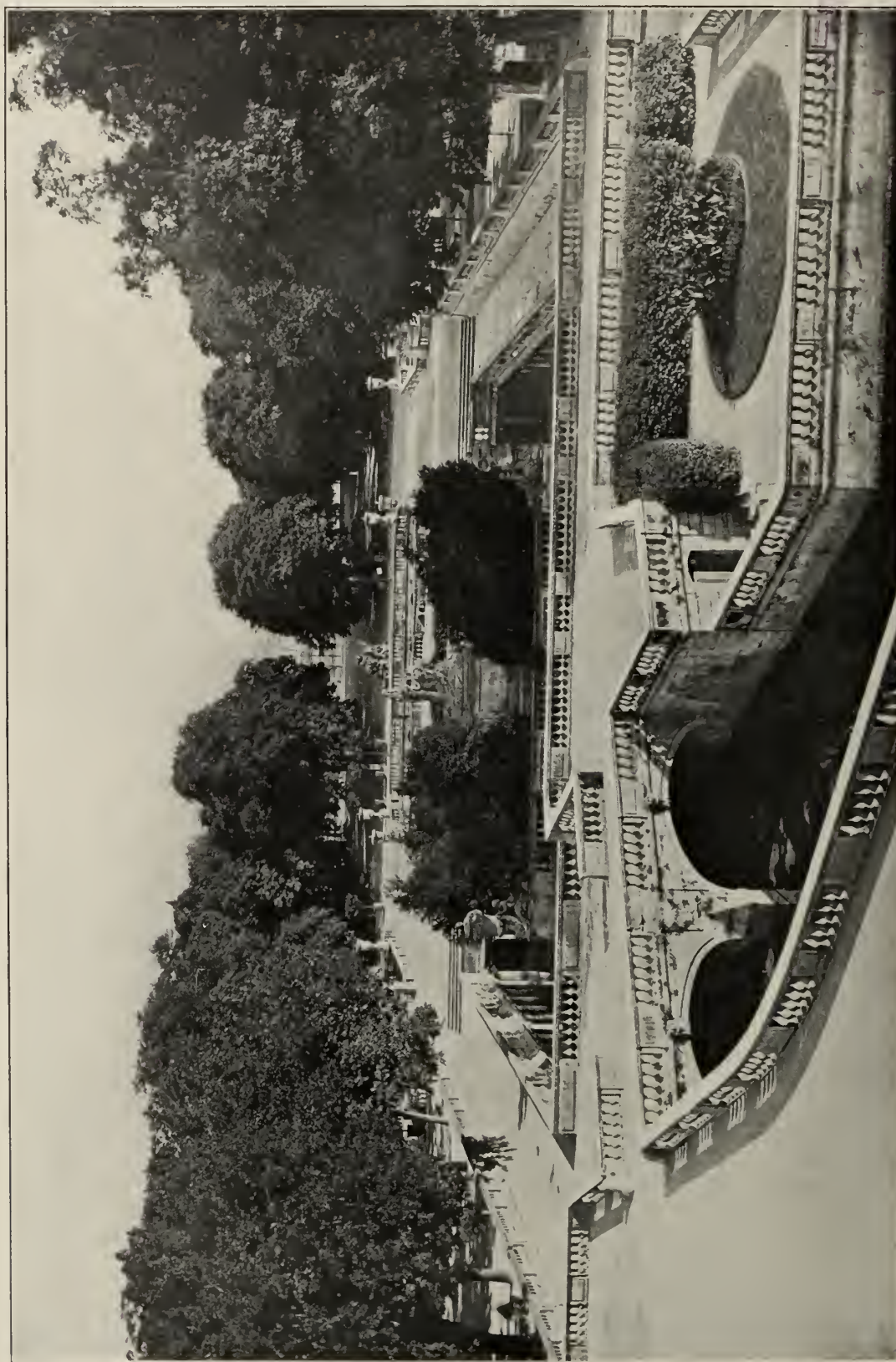
"Certainly."

"Can't you give it to my servants?"

— *Les Annales.*



THE FLOOR PLANS OF TYPICAL HOUSES
And Common to the Entire Block
Hobart A. Walker, Architect



THE WATERWAYS OF ANCIENT NÎMES

Ornamental Waterways in a City's Midst

A REMARKABLE CONSTRUCTION OF THE ROMANS, EXCAVATED IN THE SIXTEENTH CENTURY,
IS THE *JARDIN DE LA FONTAINE* AT NÎMES¹

BY GEORGE B. FORD

ON visiting Nîmes one cannot but be impressed by the great extent of waterways and gardens. "What really was the use of all these constructions?" one asks, "which have not seen the light of day for so many centuries"—for it is only within comparatively few years that they have been excavated. What must they have represented, these strong foundations, these wide channels and numerous hemi-cycles? Should we, in imagination, reconstruct here the great Roman bathing establishment with its cold, tepid and warm baths, or was this impressive fabric used for public storehouses? Unfortunately, the present incomplete state of the excavations does not permit a definite judgment, but we may surmise much as follows.

In transporting their customs to Gaul, the Romans quite naturally thought of using the springs for their public baths as they had done at Rome. The baths,² which, at first, were only of cold water, then with the addition of lukewarm water and of steam, became finally a vast group of promenades, places for games of all sorts, libraries, gymnasiums and theaters. Gathered into one ensemble were buildings which we usually separate. It was the meeting-place of all classes for gratification of the mind and senses.

Below the famous spring on Mont Cavalier there was built, at a date which cannot be exactly determined, an almost square basin surrounded by short columns, in the middle of which was constructed an island, square in form. This latter was surrounded by a high retaining wall, decorated by a rich frieze and surmounted by a balustrade,

at the corners of which were large pedestals capped by vases. Behind the short columns above mentioned were bathing basins. Water was brought into these from the channels just outside, while protection and privacy were gained by the placing of hangings between the columns.

From the rectangular basin with its island the water runs southward, passing out through four grilled openings, calculated to take care of even the highest spring freshet. Part of the water then passes into a canal called the "*Canal des Passes*," on account of the large stones which span it, above the water, at regular intervals. Formerly the water next flowed into a lower basin which, in its modified, semi-circular form, is known to-day as the "Roman Baths." A part of this was covered by large tiles resting on pillars. Here the bathers of the second class could, by stretching cloths between the pillars, bathe in privacy and at their leisure. The water then went on by the canals to be distributed by pipes to all parts of the city.

Under the Antonines, early in the Christian era, Nîmes enjoyed a long period of prosperity. It was then that many structures were erected of which we now see the remains, as well as many more of which all trace is now lost. The baths were destroyed several centuries later during the invasions.

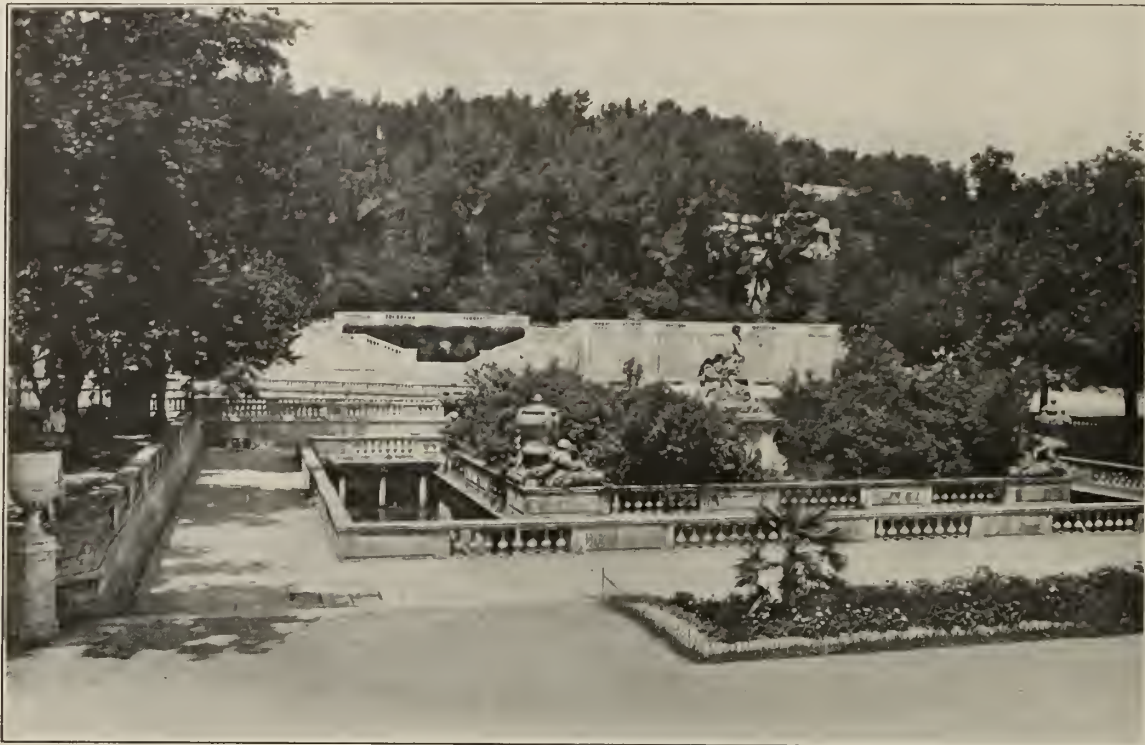
The remains of the baths and aqueducts rested buried some thirteen centuries and were almost forgotten when, toward the middle of the sixteenth century, some millers, in digging a water-course for their mills, came across six large canals near the spring. This led to the excavations which resulted in disclosing the whole series of ancient waterworks.

It is interesting to see the effect that the famous spring has had on the town, and for that reason let us see for a moment what must have been its early history.

It was usually near a spring that the Nomadic Celtic tribes first turned from their wild life to the more settled life which leads to civilization. So it was that here at Nîmes the Roman invaders discovered an important Celtic town. It is to

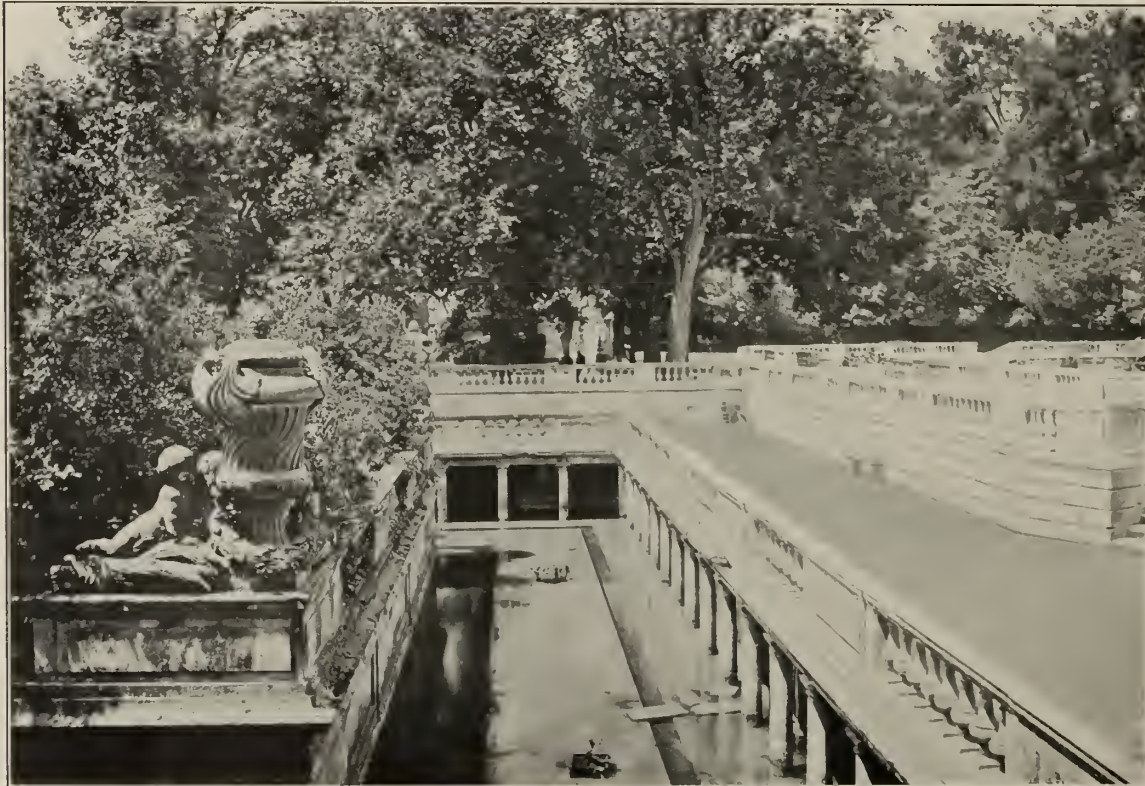
¹ Situated at the foot of low hills in the South of France, and exposed to hot and dusty winds, Nîmes has little attraction for the casual visitor other than its remains of the Roman period. It contains more of these than any other city except Rome itself. Not only did Roman rulers ornament it, however; the kings of France and the lesser nobles who held sway over Nîmes conferred many favors upon the city, and it was Francis I who founded its School of Arts. On the other hand, many have been the vicissitudes of the venerable town. Ravaged by the Vandals, the Visigoths and by the religious wars of the Middle Ages, it was to suffer, upon the revocation of the Edict of Nantes, the emigration of many of its inhabitants, and as late as the year 1815 it was pillaged by Trestaillon and his followers.

² It is generally supposed that Agrippa built the public baths at Nîmes as well as the Temple of Diana, which stands near by a partial ruin, and also the aqueduct of the Pont du Gard. The city walls, nearly four miles in circuit, were erected by Augustus. Hadrian, on his way back from Britain, it is recorded, erected at Nîmes two memorials of his benefactress Plotina.



A VIEW LOOKING TOWARD MOUNT CAVALIER

On which is the Spring that feeds the Waterways. The Hill is threaded by pleasant Promenades provided with many Seats



THE CENTRAL FEATURE OF THE GARDENS

In the Colonnades of which the Romans bathed

this spring, about which the Romans formed a special cult in the name of Nemausus (whence Nîmes) that the city owes its existence. Some historians hold that it determined the location of the city. An inscription dating from 25 B. C. shows that Augustus, when on a journey through Gaul, had many changes and repairs made in the spring then existent. At a very early date a small temple, which later became the Palace of the Baths, was built on the banks of the spring at the base of a wall of rock. This made easily possible the ablutions and purifications in which the heathen priests so often indulged. From the time of

Augustus onward the history of these waterworks was much as we have already described it. They have been restored in recent years and now are used as a feature of a most charming public park.

The illustrations shown are all from photographs taken about the rectangular basin with its enclosed island. In one we look up toward the terraces on the hillside; in another in the opposite direction over the parks and the city; in the third we see a detail of the rectangular basin itself. It is a most interesting group in its suggestions as to the decorative use of water flowing through the heart of a city.

Walk Construction

BY RICHARD SCHERMERHORN, JR.

WALK construction differs very little from that of roads. In each it is necessary to obtain a good foundation and proper drainage. The thickness of walks, however, is materially less than that of roads, and it is not so necessary that the surface be hard. Gravel, broken stone, brick and concrete are all used extensively for walks. Gravel is always attractive, but is apt to scatter about the lawn to its decided disadvantage. Broken stone walks fashioned after the principles of macadam roads are always satisfactory. Brick walks are most attractive, but expensive; while concrete walks are really unattractive, but at the same time very substantial. Four feet is a sufficient width for a walk of general character and a "crown" of one inch for this width is all that is necessary. In fact, if the land is flat, it is not really necessary to provide a crown at all.

Gravel walks are constructed by merely stripping the topsoil, grading to even slopes, rolling the bed firmly and solidly and then depositing the gravel. (Two inches is sufficient.) Ordinary gravel has no binding qualities, so it must be expected that these walks will be loose unless only a thin layer of gravel is used and consolidated with the earth itself. A thickness of 2 inches of broken trap rock or limestone covering, filled in with screenings and then thoroughly watered and rolled will make a first-rate path. More substantial ones, such as are used for parks, may be

formed by using a greater depth of stone or paving underneath in telford fashion. Brick walks are formed by providing a good substantial foundation of sand or cinders (6 inches at least) and setting and ramming the brick very carefully and accurately thereon. Screened sand is then brushed carefully over the surface until all spaces between the bricks are filled. Grout is sometimes used for this purpose instead of sand, but it is not necessary except under certain conditions. As concrete is severely acted upon by frost, almost the principal consideration in this case is a good foundation for the walks. Therefore, concrete walks are generally prepared in the following fashion: Foundation, 6 to 8 inches of steam cinders or clean, pure sand, 3 to 4 inches of a fair concrete mixture, and a 1-inch coating of cement and sand mixed evenly or very nearly so. Then, as the expansiveness of concrete is well known, allowance must be made for this, so the walk is generally divided into rectangles or squares not greater than 5 feet either way and joints made about a quarter of an inch thick between these squares, the same being filled with sand. This prevents the walks from cracking, — at least it should, if well done. Good broken stone walks should not cost over 40 cents per square yard, while concrete walks cost more than double that amount. The cost of brick walks is according to the class of brick used, but in the least expensive case, is greater than broken-stone walks.

An Attic Transformed

BY A. J. HARPER

With Illustrations by the Author

THE word "attic" brings instantly to the mind a picture. A long, low, unfinished space with rough rafters running from the peak or ridge of the roof and meeting the floor in dark angles where we have many times crawled over boxes and seatless chairs in search of our winter caps or other long-missing articles.

In the average house, this space is given up to storage, and after everything has been packed away, the greater portion remains unused. The peak of the roof is far above the floor, and one may walk some distance on either side without stooping to save his head from injury. The intersecting angles and the penetrating dormers add interesting nooks and corners, and create, in an inventive mind, a desire to put this space to better use.

When the number of rooms in the house is limited, what more suitable place than this can be found for a billiard-room?

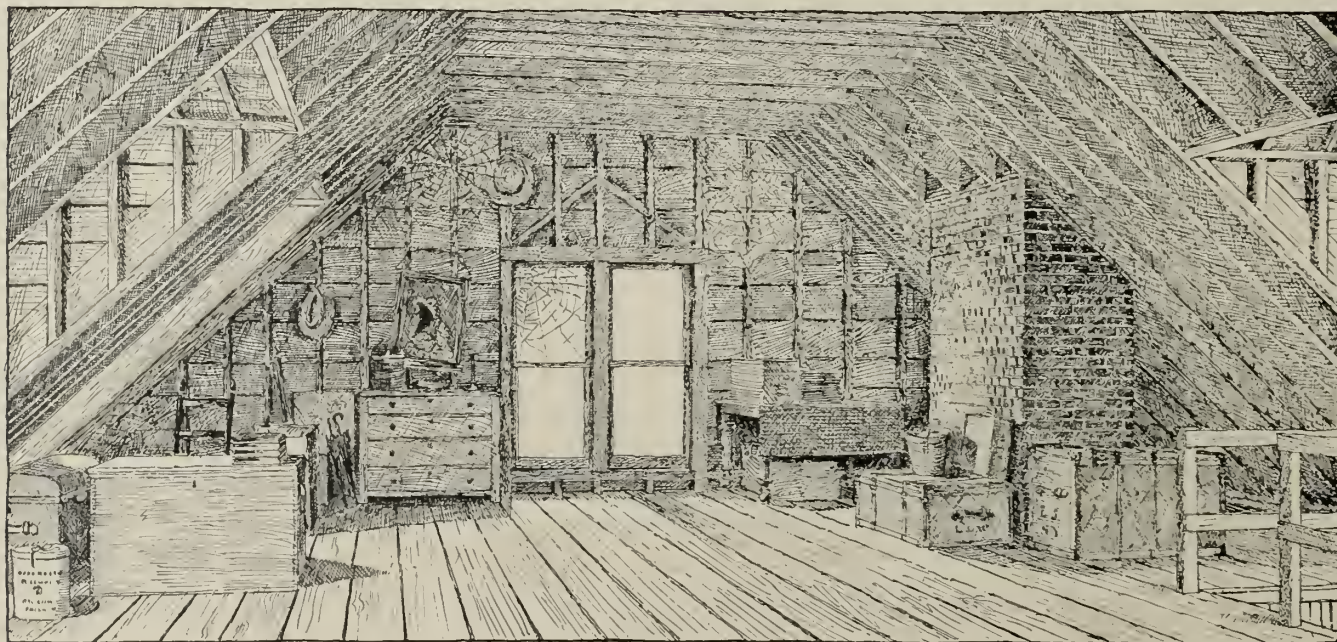
Let us assume a wing twenty-eight feet wide with a clear space of thirteen feet under the ridge, in the gable end a double window, dormers breaking into the slopes on both sides, a wide, rough chimney making its way through the floor and the roof, and, leading down from one side, a flight of plain stairs. Here we have conditions typical of many country houses and a space that

lends itself to an effective and dignified treatment.

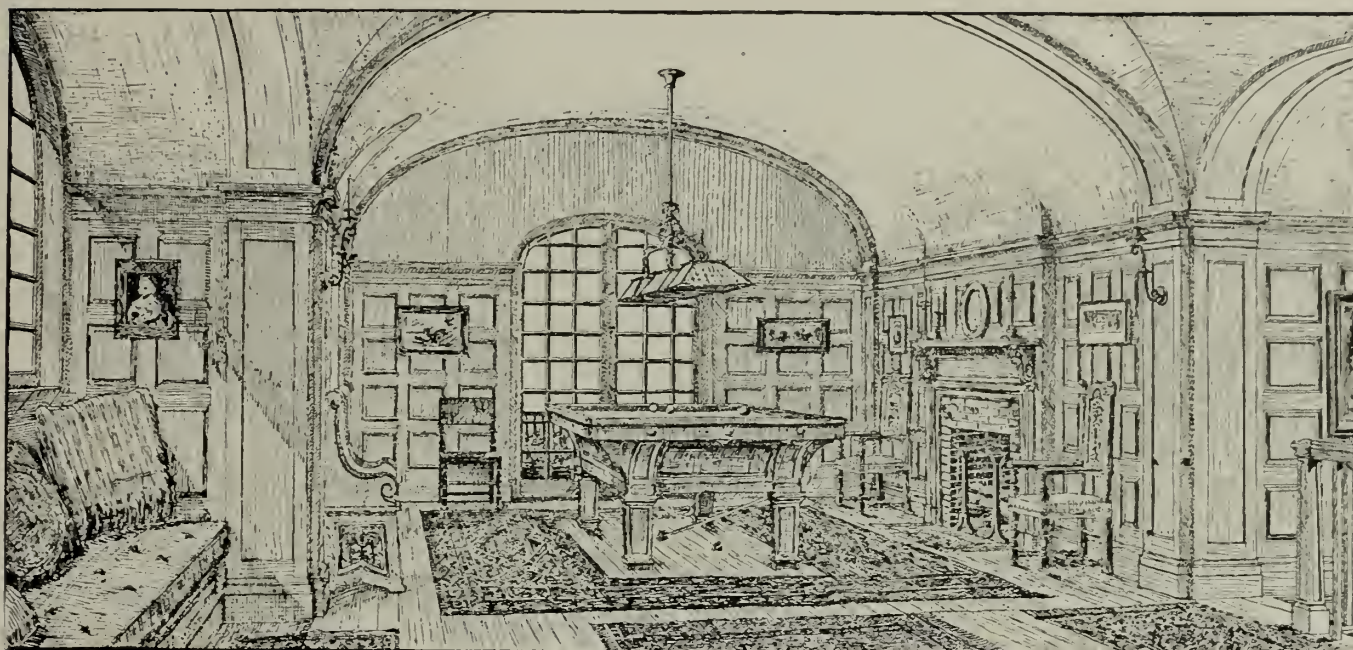
In order to obtain a finished room of the required size the walls must be lower than the necessary ceiling height of the room. This eliminates the idea of a flat ceiling, and a scheme of elliptical vaults suggests itself, the rafters and bracing furnishing an adequate frame.

In the sketch the side walls are six feet high, and the ceiling at the center is nine feet six inches above the floor. These conditions give a room fourteen feet from wall to wall, the width being greatly increased at the dormer penetrations, into which comfortable window seats have been fitted. Simple paneling in oak, chestnut or cypress, rubbed down to a dull finish, capped to receive the ceiling and relieved of its monotony by slight breaks at the angles and corners form the walls. Broad ribs carry across the ceiling. An unpretentious mantel surrounds the fireplace formed in the old chimney. It is faced with warm gray Roman bricks. The stairs are refitted in harmony with the room, the window-heads cut to be concentric with the curve of the ceiling, and the attic space becomes one of the most interesting rooms of the house—a room that could not possibly be devised anywhere but in this upper floor.

The ceiling should be of roughly finished



THE ATTIC AS IT IS



THE ATTIC AS IT MIGHT BE — A BEAUTIFUL BILLIARD ROOM

plaster toned down to a warm gray to relieve the glaring whiteness and to harmonize with the dull-toned woodwork. The finished hardwood floor is laid directly on the rough attic floor. The space behind the panels may be utilized for storage by placing concealed doors in the wainscot-

ing, and here, by introducing cedar, a moth-proof closet may be added to the house. The cost of executing this scheme would depend entirely on the materials and details used. It could be made very reasonable or quite expensive, according to the desires of the owner.

Bordentown Water Gardens

WHERE THE EGYPTIAN LOTUS WAS FIRST NATURALIZED IN THIS COUNTRY

BY M. H. DARLING

THE originator of water-lily culture in America was Mr. E. D. Sturtevant, a florist who settled in Bordentown, N. J., in 1865, and lived there until 1889, when he removed to Hollywood, Cal. In Bordentown he procured the rental of a pond for the propagation and naturalization of the *Nelumbium speciosum*, the Egyptian lotus. This *nelumbium* is, also, the sacred lotus of India and Japan, and much used by the natives of those countries in decorative and ornamental designs.

The results of Mr. Sturtevant's efforts were entirely successful, much beyond his hopes; and when Samuel Parsons, Jr., was Superintendent of Parks in New York City, he purchased five hundred dollars' worth of water plants from the

Bordentown florist as a beginning for the stocking of Central Park ponds and those of other city parks.

The mill-pond water-garden belonging to Mr. Sturtevant was finally destroyed when the mill was burned down and the water drawn off, so that the plants perished.

In his enthusiasm over the beauty of this particular lotus, *Nelumbium speciosum*, Samuel Parsons, Jr., wrote: "Picture for yourself a pumpkin-leaf, erected three or four feet high on a stream, and great buds that look for all the world like gigantic tea-rose buds, and you will have a fair idea of the appearance of the lotus. Of course, the leaves of the lotus are more finely veined and smoother, and more shining of texture, and the flowers



EGYPTIAN LOTUS AS NATURALIZED IN A POND BY MR. STURTEVANT

grander and richer in tint than the tea-rose bud; but for all that, the pumpkin-leaf and tea-rose bud comparison is a suggestive one. The botanical name of the lotus, *nelumbium*, signifying a rose or spray of a watering-pot, is very descriptive of the curious seed-pod."

The pond at Bordentown was covered from shore to shore by the growth. This *nelumbium* crowds other plants out, and needs to be thinned every year, when it is grown for ornamental purposes and not for commercial ends. It is the greatest feeder of all aquatics, thriving in the richest, rankest mud and clay, and can be grown in very limited space, like half-tubs in a small garden.

Mr. Sturtevant had, also, a tank in his town garden where he cultivated the *Victoria Regia*. These splendid flowers were very handsome, resting on the water in their fragrant white waxen beauty. The *Victoria Regia* (royal water-lily) is not a native of North America, and not hardy. It requires, in the Eastern States, a basin with artificially heated water at about eighty-five or ninety degrees, until July. The leaf of the *Victoria Regia* turns up sharply at right angles, forming a rim like a dish, and the strength of the leaf is so great that it will sustain a man standing upon it as it grows in the water.

Another Bordentown water-garden is owned by Mr. William Macfarland, a writer on plant life, and superintendent of schools.

It is a cement basin, three by five feet, filled with hardy water-lilies, a sweet-scented Cape-Cod pink, or *Nymphaea odorata* (var. *rosea*), which is an early bloomer, and yellow lilies with spotted leaves, (*Marliacea* var. *chromotella*), and water-hyacinths bearing brilliant blue flowers. The hyacinth is not hardy, being a tropical plant, and is removed to the house in winter, where it grows well in a jardinière. There are a few goldfish in the

basin, which help in keeping down the green fly and mosquito larvæ. Sometimes frogs come to it.

The water-garden is located in a picturesque town yard, showing how much may be done



A CORNER OF MR. MACFARLAND'S GARDEN

with other interesting attractions in a limited space. It has, besides, a path which leads to a vine-wreathed bower, and the lawn comes up to its very edge. Blue flags and lilies grow near by and make this corner of the grounds most attractive. When cold weather comes the water is taken out of the basin some eight inches and a cold frame put on. Over that is laid a covering of leaves or straw, with boards on top for extra protection in the hard winter weather.



MR. MACFARLAND'S WATER GARDEN

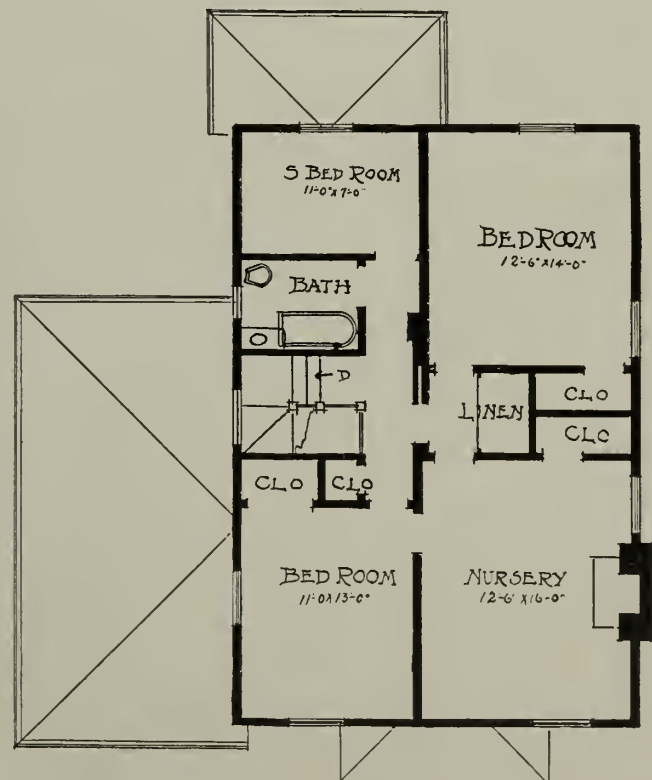
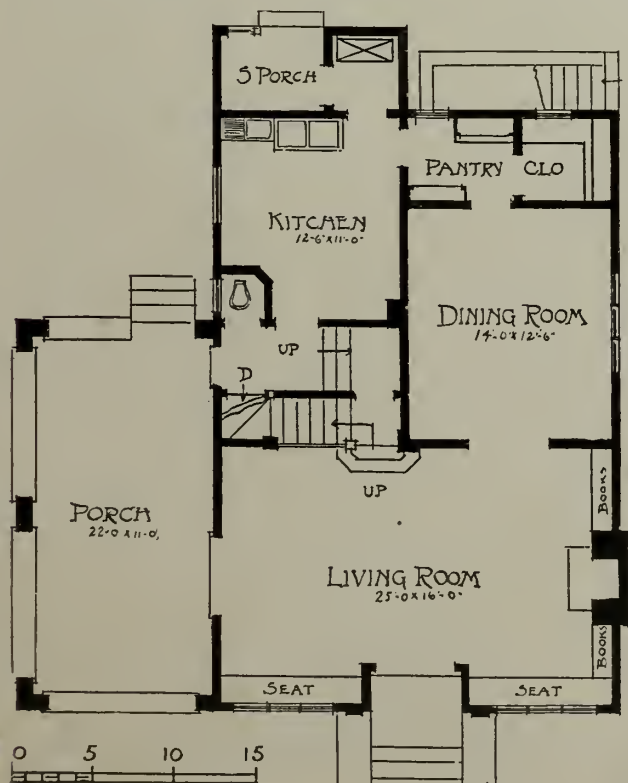
A Small House that is Well-Designed

THE PROPERTY OF J. L. JOHNSON, ESQ., AT HACKENSACK, N. J.

MANN & MACNEILLE, ARCHITECTS

A SMALL house well planned is the best contribution to simple housekeeping that can be devised; with a well-designed exterior, it also becomes an ornament to the neighborhood. What may be regarded as the necessities for comfortable living are so much less in number than

imaginary needs, it is interesting to see a house in which the essentials are provided, and without too rigorous a limitation of the term. The new home of J. L. Johnson, Esq., at Hackensack, N. J., offers a particularly good example of such a house. The keynote of the design is sim-



THE PLANS OF THE TWO FLOORS



*Entrance to the Dining-Room
Start of the Main Stairway*

A VIEW OF THE LIVING-ROOM

The Front Door

plicity, and the plan as well as the exterior gains its distinction by rigid adherence to this principle.

There is no front hall, but the entrance door is recessed to accommodate storm doors in winter and screen doors in summer. The entrance is directly into the living-room, and directly from this room the stairs ascend. Glass doors at the left open upon a large piazza enclosed by screens in summer. In winter it is enclosed with glass and is heated and furnished the same as the

rest of the house. By this close joining of the piazza and living-room a certain spaciousness is secured, as well as a virtual extension of the living-room, which is already sufficient in size to hold a grand piano and other large pieces of furniture, and to entertain comfortably a much larger number of people than is customarily undertaken in a house of this size.

The back stairs combine with the front stairs. There is an outside door which gives direct communication with the kitchen in the event of the family taking their meals upon their piazza. This door also gives an entrance to the cellar in addition to the area stairs at the rear, and it provides an outside entrance to the toilet.

In the second floor, four well-shaped rooms, a bath and ample closets provide all that may be desired. The absence of a third floor renders the exterior proportions agreeable.

The site of the house is very fortunate, as it is on a high ridge of land with good outlook in all directions. The lot also, which is seventy-five feet wide, is sufficiently large to lay out the grounds simply and attractively, and to make the house



THE FRONT ENTRANCE



THE STREET FRONT OF THE HOUSE

stand sufficiently isolated from its neighbors to show off to full advantage.

Economy of construction, as well as exterior dignity, has been gained by adhering to a strictly rectangular shape, both of plan and elevation. Odd-shaped windows and projections, such as bay windows, have been omitted. The exterior is covered with old-fashioned shingles, each course being exposed twelve inches to the weather.

These shingles are painted white, and the blinds, eaves, gutters and front porch are a pale green. A feature on the front of the house is a horizontal vine trellis, which is ornamental now, even when the vines have not yet reached it.

The house stands as an example of an extremely small and modest home, which has, by virtue of its simplicity, a distinction among its more pretentious neighbors. H. M. K.



The Castle Brollo, near Siena, Italy
Property of Baron Firidolfi



CORNICES TO HIDE CURTAIN RODS. — A following of much the same principle as the hanging of large curtains behind gilded wood cornices is seen in a small cornice of molded brass, which is intended to improve the appearance of small curtains in being set in front of the supporting brass rods and rings.

A NEW FORM OF SMALL TABLE for the bay window has, instead of a single lower shelf inviting useless bric-a-brac, a wood tray, four inches deep, for flowers. Inside this a movable lead pan is fitted. Flowers or ferns so placed, about a foot from the floor, grow in an entirely natural position and are out of danger of being upset.

CHRISTMAS DECORATIONS.—When holly is not easily accessible, and the cost has to be considered for somewhat extensive decorations for the Christmas festivities, the red alder, which grows abundantly in many country places, is a good substitute. Arranged with branches of spruce or hemlock, or even cedar or savin, or any of the evergreens, the want of leaves is not manifest, and the red berries bring cheer for the festive season.

RAFIA FIBER is becoming better known in this country as well as in Europe. Its use for making baskets, hammock pillows, screens, etc., has been extended to weaving many varieties of fabrics, from the coarsest of packing to elaborate materials for clothing, and even Panama hats are made of it. It can be spun or split to a fine degree, and has the appearance of silk when finely woven. A similar fiber is to be used by a larger plant about to be erected in Sweden for the manufacture of vegetable silk.

WHEN CUT FLOWERS ARRIVE from a distance, having been kept long out of water, the stalks should be cut afresh immediately before being placed in water. The stems should be slit up an inch or two, which will permit

absorption more readily. Stems which are stiff or of a woody nature may be scratched at intervals. Some flowers, like the Oriental poppy, have a milky juice which hardens where the stem is cut if not put immediately into water. Cutting afresh and slitting the stem prolongs their life to an amazing degree.

THE IMITATION OF MAHOGANY practised by furniture manufacturers is well known, cherry, birch, maple, beech and gum being chiefly used; but it is not often realized that other woods, now growing scarce and expensive, are being imitated so successfully that wood experts themselves are often misled. The new trick in the old trade of the furniture maker is to simulate quartered oak by first "filling" the grain of a cheaper wood and then printing the quartering on in dark ink by one impression of quartered oak rolls or by a transfer from the quartered oak by a secret process. Finishing and polishing completes the delusion.

CUSHIONS, CUSHIONS EVERYWHERE, but not one to use! is the thought which often comes to the weary person pausing before a pile of the painted rosebud-on-white-satin variety. Cushions may be beautifully embroidered on velvet or satin, but let them not be so delicate in coloring that they are fit for ornaments only. Tapestries and damasks also make beautiful, and really serviceable, cushions for the more formal rooms. Leather cushions for the resting place on the stairs and the nook by the fireplace in the hall are unequalled, and they can be obtained in varying shades of brown, green, dull orange; in fact, almost any desirable color. Leather and rep will stand any amount of hard wear in the living-room, as will also washable covers of denim, canvas and linen. Chintz, cretonne and art ticking should be reserved for the bedrooms, and white linen with dainty embroidery, which may be frequently washed, shows here to the best advantage.

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The Quest of the Colonial

"THERE is, as yet, no essential scantiness of supply of the delightful and desirable old. There is just enough of scantiness to render the quest alluring." In "The Quest of the Colonial,"* Robert and Elizabeth Shackleton tell how, with perseverance and enthusiasm, they made their collection of delightful old bits of mahogany, walnut, china and brass. Descriptions and illustrations of various types of old furniture are given, with useful hints for the collector who is seeking the "real thing." Advice is offered in choosing furniture which is both charming and useful, while aiming at propriety and proportion, and the reader is reminded that the home is being furnished with furniture that must be lived with,—that a museum is not being filled for exhibition. Also, it is the personal

touch which comes from the associations in discovering pieces for one's self rather than obtaining them through a dealer. Many episodes, from obtaining the Blennerhasset andirons in exchange for a hammock, to the discovery of the mate to a brass candlestick which an old negro woman had placed in her pickle barrel to produce a desired coloring on her pickles, give a lively interest to the book. Calling at a workshop at an inopportune time, the proprietor was discovered finishing a Chippendale chair. Grinning in sheepish defiance, he said, "At any rate, I made it out of the wood of an old tree, and so it will really be an old chair." An old-time house for the old-time furniture was desired, and one was found with a veritable ghost,—several, in fact, one of which was laid by opening a room to household use where squirrels had been reigning supreme with their stores of nuts. The progress of the quest was marked by a dinner given in a room

lighted by candles, the candlesticks each having special associations. The old Sheraton table of mahogany was covered by a linen cloth spun and woven four generations back. The soup was served in old blue bowls from a huge and aged blue tureen, and the turkey, which had been fed on the traditional beech nuts, reposed on a pewter platter, and cider was poured from an ancient tankard into the pewter mugs beside each plate. The dinner plates were huge and old and blue, and the cups were of varied interest. To "Old friends, old times, old manners, old books, old wine," many would add "old furniture," and we all agree with the authors that "No old book is so fascinating as when read from the depths of an ancient fireside settle. Nothing tastes so good as when served on old mahogany. And it is charming to see old friends seated in one's old chairs or circled about a splendid table of the past."

*"The Quest of the Colonial," by Robert and Elizabeth Shackleton. 425 pp., 12 mo. Illustrated. The Century Company, New York, 1907. Price, \$2.40 net.



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until all the rough work has been done. As soon as it is laid it should be smoothed and given a coat of wood filler and wax. Then it should be completely covered with a heavy building paper and so left until the house is ready for occupancy, at which time, the paper being removed, a second coat of wax should be applied and the surface thoroughly polished with a heavily-weighted brush.

CANNEL AND OTHER COALS. — Cannel coal, mined in Kentucky, burns with less percentage of ash and produces a greater number of heat units than any other American coal. (Such a unit is the amount of heat required to raise one pound of water 1° Fahr. from a temperature at or near the freezing point.) Next in heat-giving power come the Pennsylvania anthracites, the Kentucky and Indiana caking coals. The practical use of these coals the housekeeper finds regulated by the price, if not by the type of his heater. Kentucky and West Virginia cannel sells in the eastern market in large sizes at \$10 and \$12 a ton,

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while a cannel imported from England is obtainable at \$15. The great increase in the price of cannel coal over the cost of furnace sizes of Pennsylvania anthracite renders the former too great a luxury for cellar use. Cannel coal is appropriately burned in the fireplace where it makes a clean fire and is easily handled.

FRESH AIR SUPPLY FOR FURNACES. — The fresh air duct leading to a household furnace can, under certain conditions, operate in a contrary manner from that in which it is intended. The duct should open upon the side of the house facing the prevailing winds, in order to gather the fresh outdoor air and feed it to the furnace. But in the case of houses in exposed situations a shifting of the wind to an opposite quarter has been known to suck the warm air from the house and carry it through the furnace and fresh-air duct. This refractory condition can be avoided by having two ducts, each leading from opposite sides of the house and meeting at a point near the furnace, where the introduction of dampers enables that duct which happens to open upon the lee of the house to be shut off for the time and the air admitted from the windward side. The fresh-air duct should admit to the furnace three-fourths of the quantity of air which passes through the total number of heat flues in the house.

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SWEET PEAS FOR INDOOR BLOOMING. — Few experiences in indoor gardening are more satisfactory than that of growing choice sweet peas in a sunny window. The outdoor varieties are seldom satisfactory for this purpose, as they grow slowly and often wait until spring before blossoming.

The florists of late have been taking advantage of a new race of winter-flowering sweet pea hybrids, said to have been crossed with a vetch, which blossoms early and freely under glass, even in winter. Obviously, these give great promise for the home gardener and are well worth trying. For several years the sort called "Xmas Pink" has been a favorite with the florists; in form and color it is like the well-known Blanche Ferry. The Florence Denzer is a pure white and the Mrs. E. Wild is a carmine red; both these are of recent introduction. There are also a number of novelties in various colors, offered this season. Niger is a very dark purple; W. J. Stewart, a self blue; Mrs. Wm. Sim, a salmon pink, and Mrs. Alex. Wallace, a lavender.

Try a windowbox of these winter-flowering sweet peas. Get a tinsmith to make a water-tight box of sheet zinc, as long as your window and about four inches wide by five inches high. Fill with good garden soil; plant these sweet peas sparsely, about an inch deep, and watch them grow and blossom. Start the white seeds in wet blotting paper before planting.



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An Architect speaks His Art

THERE is a peculiar significance in one of the most eminent English architects, considering the "Essentials in Architecture"* from the point of view of the layman. His book recalls to the architectural student well-known truths, but its appeal is mainly to that small but ever widening circle of the general public, who have both the leisure and the desire to take an intelligent and critical interest in the architecture in the midst of which they pass their lives. Architecture is not for the architect but for society as a whole; but architecture worthy of the name cannot be produced unless that society is cognizant of true and false architecture and is desirous of the good. Is it not that the very needs and conditions of modern life, particularly in our cities and towns, urgently demand the formation of a strong body of public opinion and the development of a robust and intelligent criticism in all matters pertaining to our present-day architecture that has impelled Mr. Belcher to stand apart from his designs and every-day materials and proclaim the elements of beauty in those buildings which "raise the thought and touch the heart" of all who look at them? "The artistic element," he declares, "must neither override the practical and scientific, nor yet be merely superimposed upon it, but must work with it." Yet it is the aspect of architecture which renders it an art rather than a science, that impels the author to explain *why* this is admirable and that detestable, and to otherwise separate the good from the bad. Principles, Qualities and Factors are what we may term the "three lamps" by which he lights the way to discover the glory of architecture. He chooses numerous examples of new and old buildings to make good his points, and the entire plea, emphasized as it is by terseness, is clear and convincing.

* "Essentials in Architecture," by John Belcher. 171 pp. crown. Illustrated. Batsford, London; Scribner, N. Y., 1907. Price, \$2.00 net.



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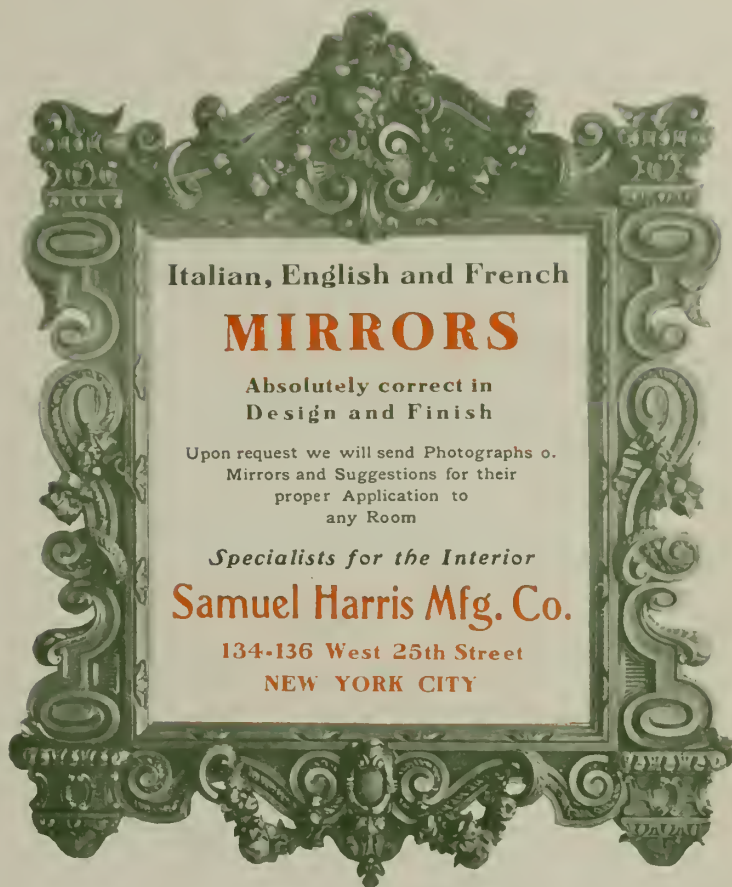
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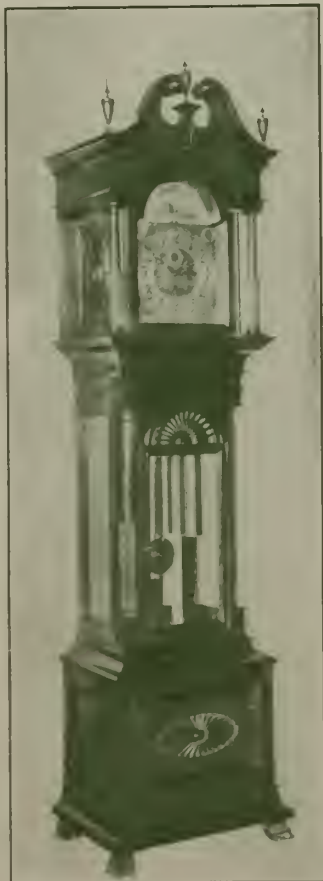
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